

THE MILLING WORLD

AND

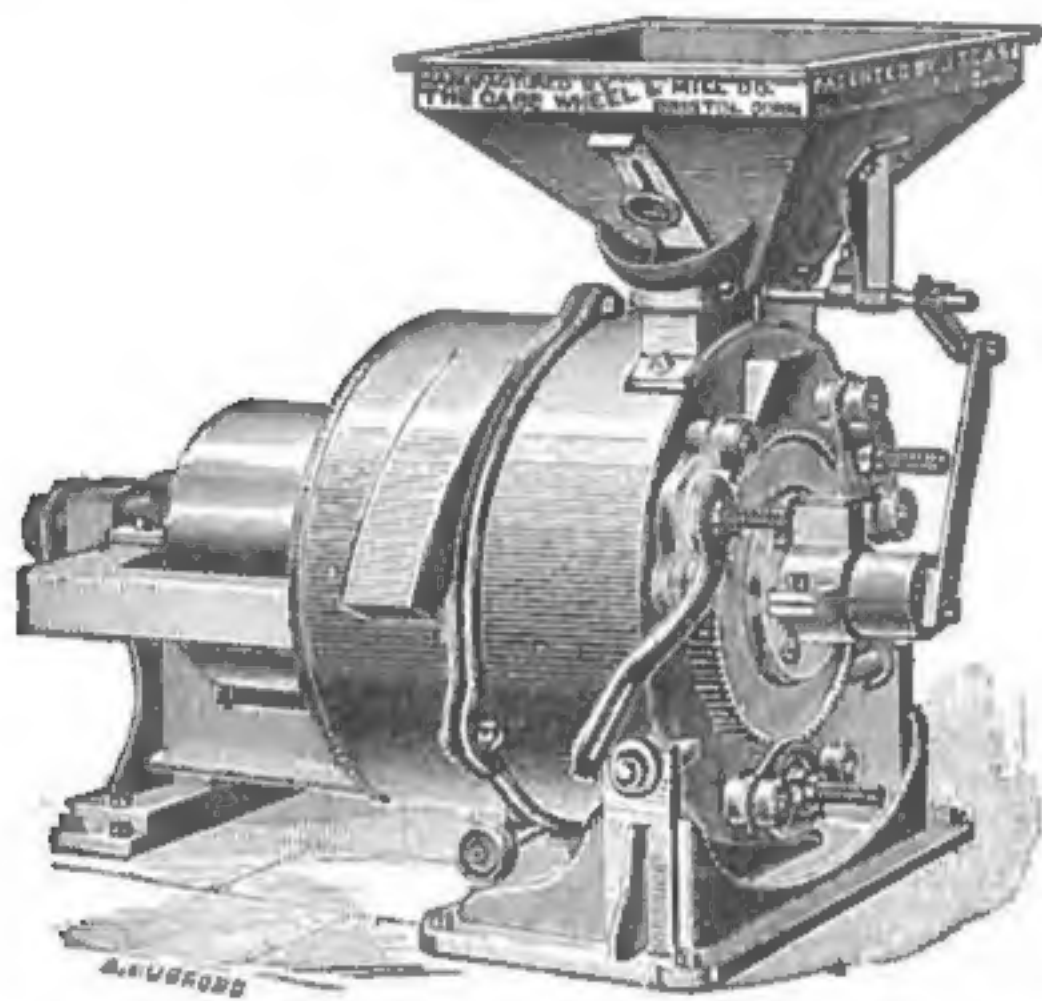
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XXII. No. 14.

BUFFALO, N. Y., JUNE 2, 1890.

\$1.50 PER YEAR.



VICTORY OVER ALL OTHERS. SINGLE & DOUBLE VERTICAL GRINDING MILLS. (J. T. CASE'S PATENT.)

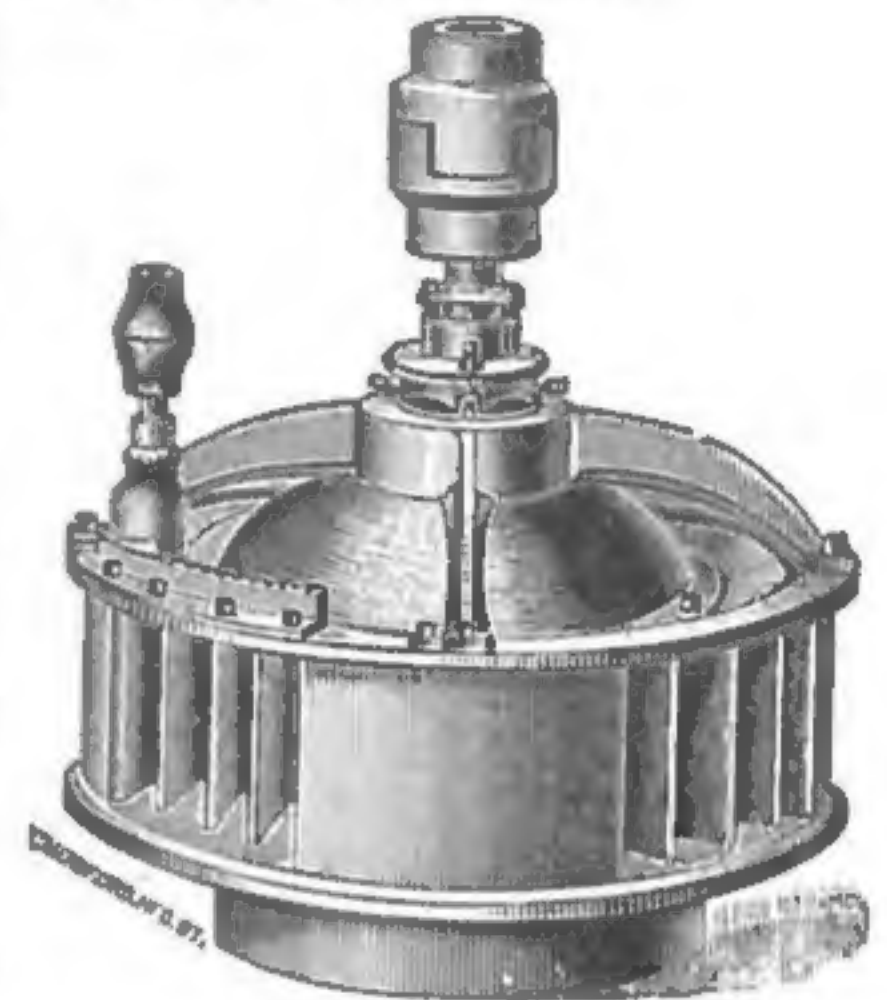
FACTS ARE MIGHTIER THAN ASSERTIONS. READ WHAT THEY SAY:

"Our 20-inch mill made by the Case Wheel & Mill Co. is in every respect satisfactory, easy to handle, and best results obtained of any mill in the country, with same quantity coal and power."—A. S. RUSSELL & Co., Meriden, Conn.
"Superior to any mill in use."—GEO. WESTON, Bristol, Conn.
"The best satisfaction in quantity and quality."—CHILD'S ELEVATOR, Manchester, Ct.
"We take pleasure in recommending it."—GARLAND, LINCOLN & Co., Worcester, Mass.

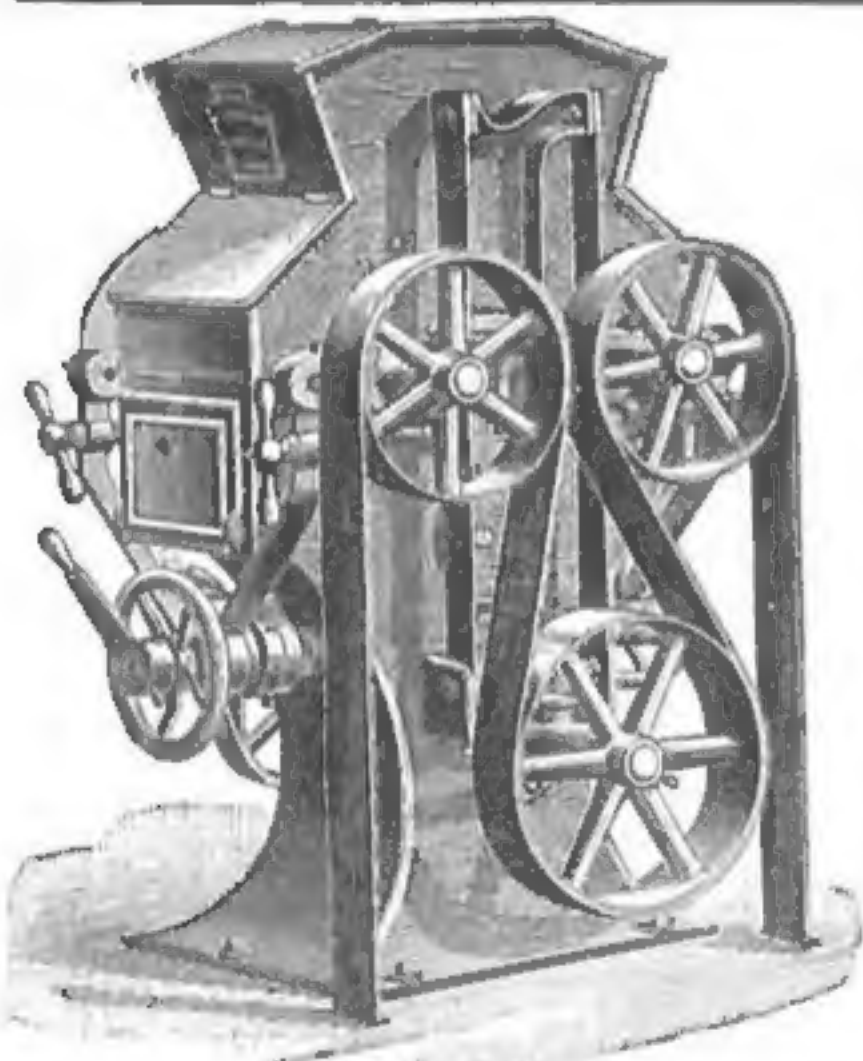
SEND FOR CATALOGUE—ILLUSTRATED AND DESCRIPTIVE.

The Improved National Turbine Water Wheel

The Best for Economy; The Best for Durability; The Best for Power. ONE THOUSAND FIVE HUNDRED NATIONAL WATER WHEELS IN USE Prove that our Assertions are Supported by the Leading Manufacturers in the Country. Send for illustrated catalogue and prices to the manufacturers.



The Case Wheel & Mill Co., Bristol, Conn.



THE "KEYSTONE."

HONEST WORK.

GOOD FLOUR.

PERFECT MACHINERY.

THE J. B. ALLFREE CO., INDIANAPOLIS, IND.

FREETOWN, IND., April 7, 1890.

GENTLEMEN: We have had the mill you built for us in successful operation since November, 1889. We are glad to say that **WE HAVE ONE OF THE BEST 60-BARREL MILLS IN THE STATE.** Our flour will compete with any thing in the market; our percentage of low grade is very small and our clean up is as good as we ask. Your rolls, in our judgment, are superior to any thing on the market, being light running, easily adjusted and having other improvements which we fail to find on any other roller mill. Your "Success" Bolters, Centrifugal, Bran Duster, and in fact all the machinery gives perfect satisfaction. Every thing is smooth, cool and easy, making the least noise of any mill of same capacity we have ever been in when running. A farmer came in a few days ago and said that our mill did not make any more noise than an easy running sewing machine. We honestly believe that our line of machines has more points of excellence than any we have seen, which is evident from the fact that this is the second complete mill which you have built for us (or practically the firm), within four years, both of which are running, this latter being an improvement over the former one, and is what its name implies, a "Model Roller Mill." Wishing you the success you deserve, we are,

Yours truly,

TOBROCK, ALDENHAGEN & CO.

CLOSE FINISH.

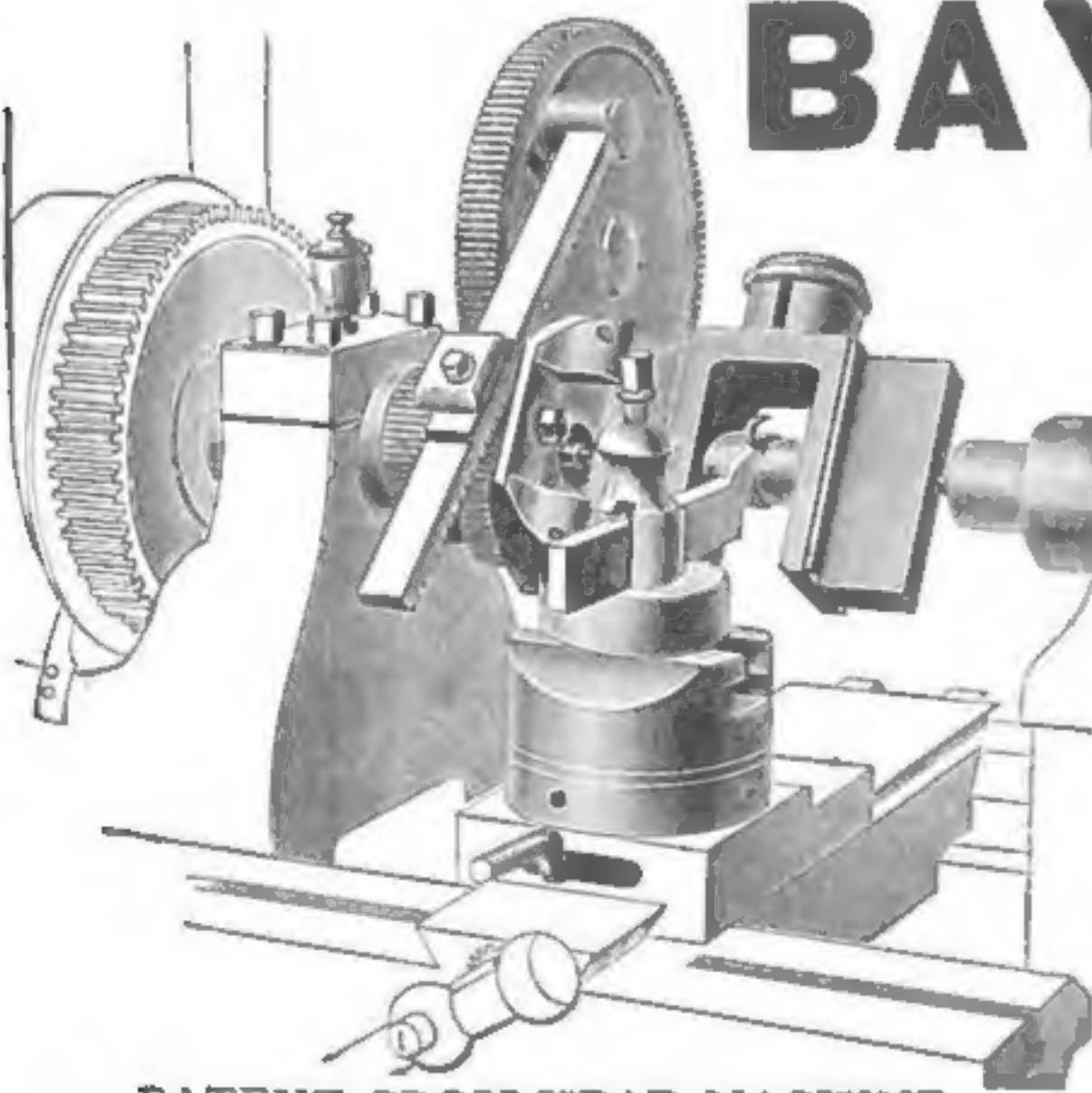
ADDRESS THE J. B. ALLFREE CO., 76 to 86 Shelby Street, INDIANAPOLIS, IND.

BAY STATE IRON WORKS

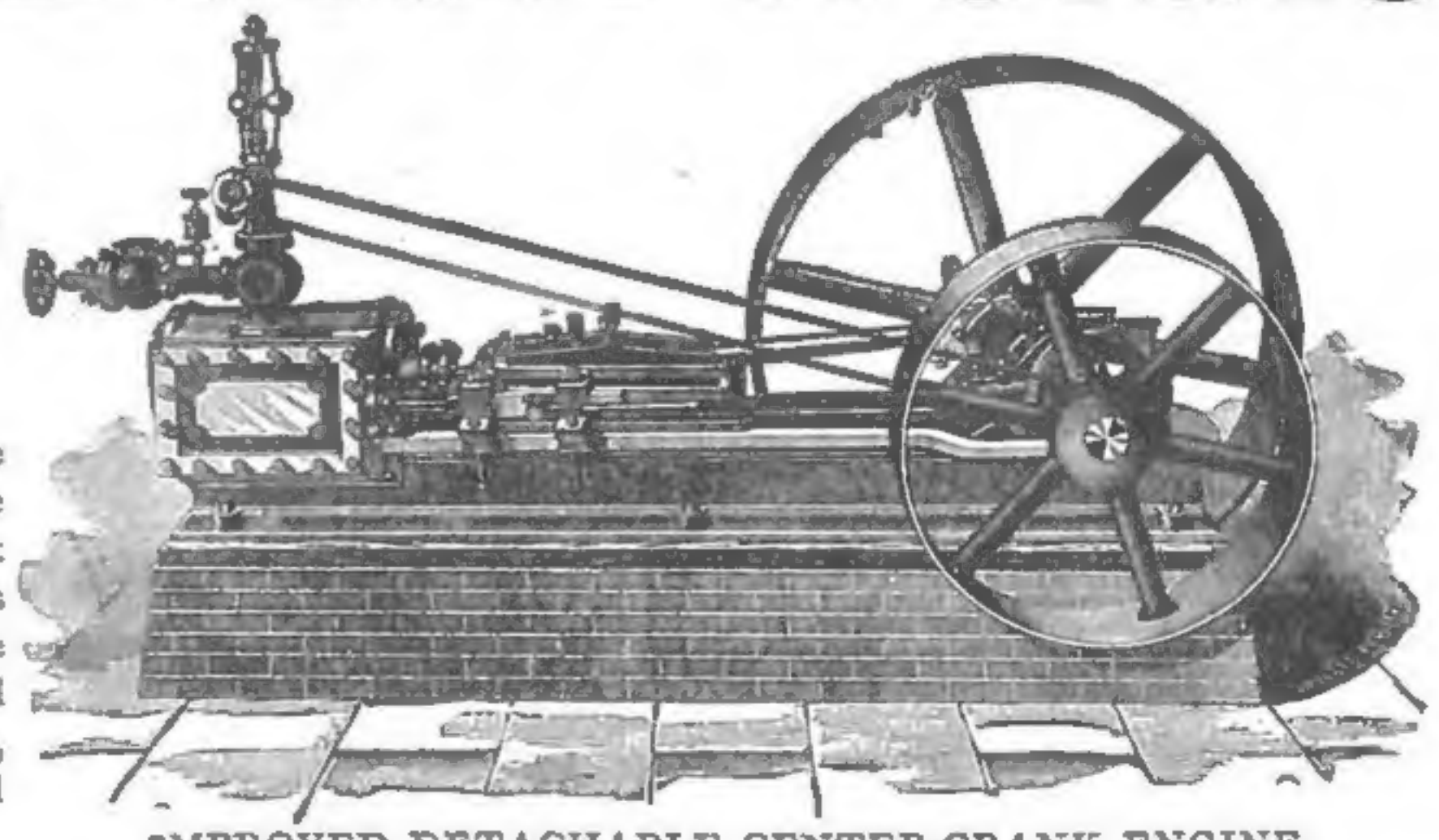
—Manufacturers of—

Engines, Boilers,
—AND—
HOISTING MACHINES.

Also the Patent Cross-Head Machine and Acme Cube Pipe Tongs. We make either Center or Side Crank Engines, on same bed. Make engines from 5 to 250 Horse-Power. Have over 3,500 Engines and Boilers and over 1,000 Hoisting Machines in use, and all giving good satisfaction. Send for Catalogues and Prices.



PATENT CROSS-HEAD MACHINE.



IMPROVED DETACHABLE CENTER-CRANK ENGINE.

Noble & Hall, Box 462, Erie, Pa.

OFFICE OF CASE MANUFACTURING COMP'Y COLUMBUS, OHIO.

The Case Roller Mills. Over 14,000 Pairs in Use.

PLEASE READ OUR DESCRIPTION OF THEM, EVERY STATEMENT OF WHICH IS ABSOLUTELY TRUE.

PLEASE READ WHAT MILL OWNERS SAY ABOUT THEM.



The accompanying cut is a correct illustration of our latest improved Four Roller Mill. For fine work, great durability, simplicity, and general excellence, they stand "head and shoulders" above all others.

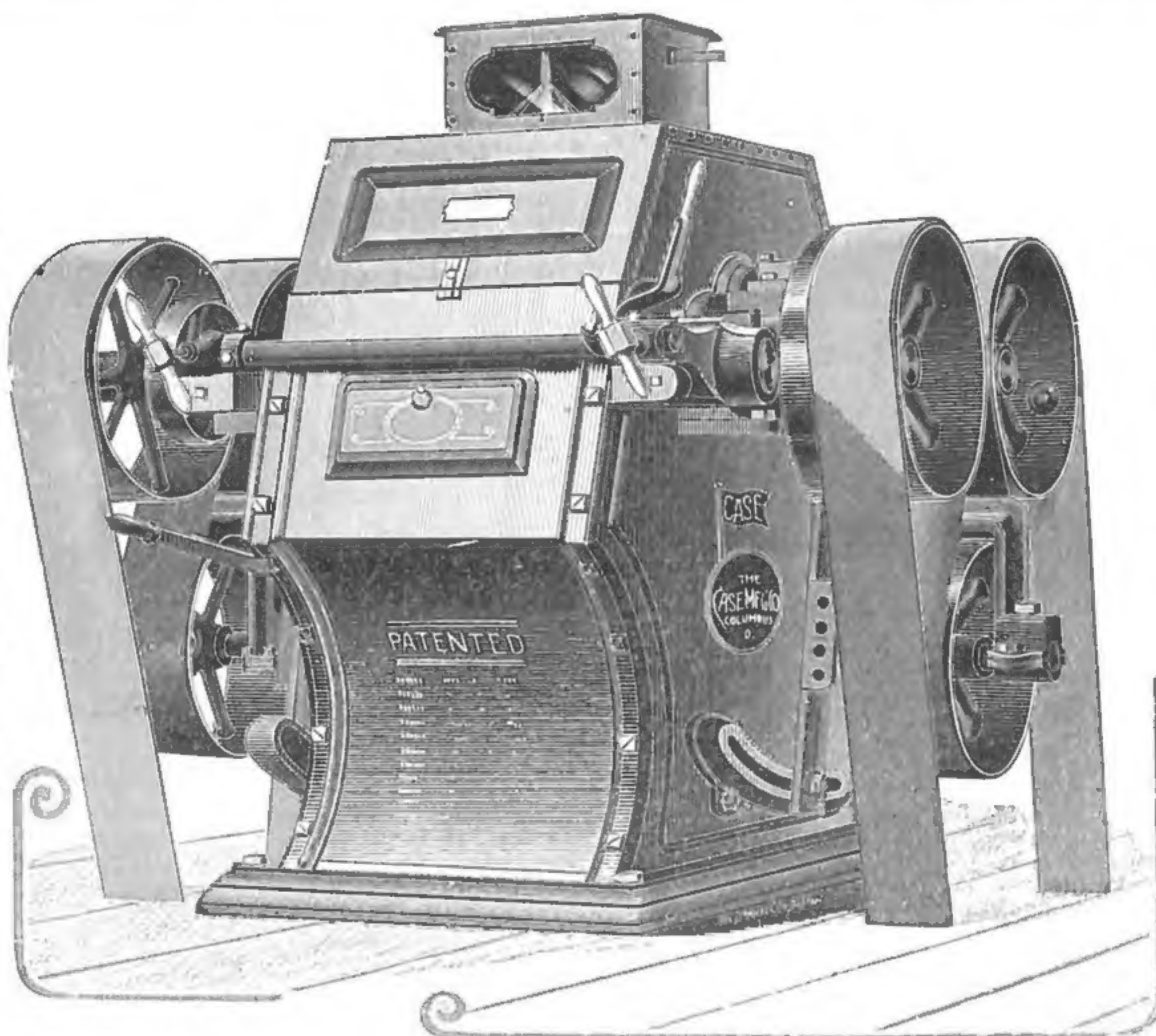
The frame is of iron with a heavy iron base.

The wood-work in top is of select cherry and black walnut, carefully shellacked and varnished.

The handles of adjusting screws and levers are finely nickel plated.

The joints are tight and dustless.

The adjustments easy, simple and perfect.



The roll bearings are wide and finely babitted.

The belt drive is positive—no little short belts to slip.

The door for examining stock is a great convenience.

The arrangement for leveling rolls, simple and accurate.

The rolls can be thrown apart their entire length by one movement of the lever, and brought back again to original position, requiring no re-setting or experimenting.

Each machine is provided with our AUTOMATIC VIBRATING FEED, which requires no attention, and never fails to spread the feed the entire length of the rolls.



Please Read These Testimonials.

LITCHFIELD MILLING CO., MANUFACTURERS OF FLOUR. }
LITCHFIELD, ILL., Sept. 14, 1889.

Case Manufacturing Co., Columbus, Ohio.

GENTLEMEN: We are in receipt of your favor of the 11th inst., and in reply would say we have twenty CASE AUTOMATIC FEEDS on our Dawson and Allis Rolls, and we are greatly pleased with them. We have tested the Feeds thoroughly on different materials, and find they work as well on bran and germ and other soft materials, as they do on middlings. We have derived great benefit from the use of them, and can cheerfully recommend them to the milling fraternity.

Yours truly,

J. C. EDWARDS, General Manager.

OFFICE OF A. J. MILLER, PROPRIETOR WHITE ROSE MILLS. }
DEALER IN FLOUR, GRAIN AND MILL FEED.
METAMORA, IND., Nov. 19, 1889.

Case Manufacturing Co., Columbus, Ohio.

GENTLEMEN: Your Feed arrived O. K., and placed it in working order in a very short time. You have furnished me a daisy Feed. After regulating your Feed, it needs no more attention. It pays for itself in one week over the "Roller Feed" in cleaning up the

stock, and also insuring the superiority at same time. I forward you the amount of bill.

Yours truly, A. J. MILLER.

TREZEVANT, TENN., Feb. 27, 1889.

The Case Manufacturing Co.

GENTLEMEN: We have five double stands of Rolls with Roller Feeds on all of them. A short time ago one of your agents induced us to try one of your Automatic Shaker Feeds. We find that it works much better than the Roll Feed, distributing the material the whole length of the Roll. We heartily recommend your feeds to any one wishing to put in new machinery.

Respectfully yours, FUQUA, HARRIS & CO.

W. C. MANSEFIELD & CO., MERCHANT MILLERS. }
CLEVELAND, TENN., Aug. 29, 1889.

Case Mfg. Co., Columbus, O.

GENTLEMEN: If we were to build a hundred mills, we would not permit any other than the "CASE ROLL" to enter them. They are the best roll on earth.

Yours truly,

W. C. MANSFIELD & CO.



VOL. XXII. No. 14.

BUFFALO, N. Y., JUNE 2, 1890.

\$1.50 PER YEAR.

WILL the Bogus Resolution be brought up in the Minneapolis convention of the "National"? Can not the editor of the "Yahoo" work in a resolution authorizing and empowering somebody to throw George T. Smith into the river and let him go over St. Anthony's Falls?

WINONA, Minnesota, is to be congratulated. The Winona Milling Company, whose magnificent flouring-mill was recently destroyed by fire, have decided to rebuild at once. The new plant will be an improvement on the old one, although that was one of the model mills of the country.

EXPORTING millers are incessantly complaining of the bill-of-lading difficulties. If the present situation is really so disastrous to their business as they assert, it would be cheaper for them to drop the export business long enough to force the ocean carriers to terms. Heroic measures often look like suicide, but generally they succeed. If the exporters are really so oppressed as they claim to be, and are losing money on their export business, the only thing for them to do is to quit. They may be overstating their side of the question, but, if they are not, it seems altogether foolish in them to handle 8,000,000, or 9,000,000 barrels of flour a year at a loss. They should quit the losing business and go to sawing wood or cultivating ruta-bagas until the transportation companies come to terms.

WHEAT-CROP reports, both spring and winter, in the United States have been, and now are, of a somewhat discouraging character, and it is amusing to note that, as American reports grow bad, European reports grow better. Every million bushels "estimated" off the American crop for 1890 is "estimated" onto the European crop. The dropping of 60,000,000 bushels from the coming American crop has caused the addition of nearly 100,000,000 bushels to the estimates of Old World crops. Evidently the men who report crops do not mean to allow the yield of wheat to fall below the average, at least on paper. The serious winter damages in Russia and other European countries have all been repaired, if the late reports are credible, and abundant crops are to be reaped in sections where the winter-killing was reported absolute two months ago.

WHEAT-GROWING in the Northwest is once more revealing the difficulties that beset it. In the Dakotas and Minnesota the winds uncovered the seed and blew both the soil and the seed away, and there has been too much frost and drouth to allow the farmers to get their wheat started. Just across the line, in Manitoba, little or nothing is reported in way of damage from drouth, frost and wind. The Manitobans prefer to keep silence concerning disadvantages that might frighten away immigrants. The Dakotans go to the extreme of telling the worst. The Manitobans go to the other extreme and conceal everything. The immigrant who is caught by the deceit of concealment will not be a permanent incomer. When he finds out that he has been deceived, or at least not fairly informed of actual conditions, he will resent the deception and move over the

border into the United States. Our Northwest has many advantages, but it has also great disadvantages, the concealment of which will do no good.

THE British millers are not advancing rapidly in the way of making themselves masters of the British flour markets. Foreign flour is still pouring into England in enormous quantities, until it is an open question whether the British millers could really grind enough flour for British consumption if they had the wheat grain at hand to grind. Possibly the quality of the flours made by British millers from heterogeneous grains, baked, steamed, whizzed, cooked and dried before grinding, may have much to do in perpetuating a large market for good and fine foreign flours in Great Britain. There must be some powerful reason why fine American and Hungarian flours are in steady demand in a country said to be equipped with mills enough to grind all the flour it needs, and supplied with cheap wheats from all parts of the world in quantities that would seem to answer every requirement. Doubtless that reason is found in the single British defect of mixing wheats before grinding, which causes the output to be a "nondescript" flour always problematic and always calling for experiment in baking.

"PREMIER GREENWAY, of Manitoba, says the crop outlook is magnificent and the wheat yield is expected to be about 20,000,000 bushels." So says a Canadian cotemporary, and we feel like exclaiming: "Here we are again!" For the past five years we have not failed to hear or hear of some "premier," or other prominent Manitoban, proclaiming that the outlook for the Manitoba wheat crop was simply phenomenal, glorious, immense, unequalled, unparalleled, incalculable and otherwise encouraging before half of it is above ground. The crop of 1890 "is expected to be about 20,000,000 bushels!" Of course! Of course! That was the identical figure "expected" for 1889, for 1888, for 1887, and for all preceding seasons so far back that the memory of man runneth not to the contrary, and yet 1889 panned out a crop too small for counting, somewhere about 5,000,000 or 6,000,000 bushels, and it would not be easy to point out any four consecutive seasons whose aggregate yield would amount to 20,000,000 bushels. The Manitoba hopefulness is very great, very tireless, and withal very tiresome. Premier Greenway has a green way of booming Manitoba, and he should attempt to restrain his expectations within mechanical possibilities. There are about 600,000 acres of land said to be sown to wheat in Manitoba this season, and it would require an average of 33½ bushels of wheat to the acre to produce a crop of 20,000,000 bushels. There may be men crazy enough to believe that Manitoba can yield 33½ bushels of wheat per acre, but they are all under confinement, and most of them are in the padded cells of the incurable wards of lunatic asylums. We repeat that gross exaggerations of the Greenway stripe quoted will in the end hurt rather than help Manitoba. Statements that discredit history, ignore facts, assert mechanical impossibilities and call for childlike innocence in believers will not help any province or any country. Even "premiers" should tell the truth and keep the closest possible company with common-sense.

The DAWSON ROLL WORKS CO.

FOUNDERS & MACHINISTS,

—MANUFACTURERS OF THE—

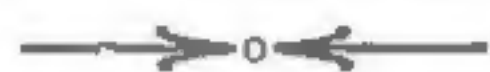
Dawson Roller Mills

—AND FURNISHERS OF—

CHILLED IRON ROLLS

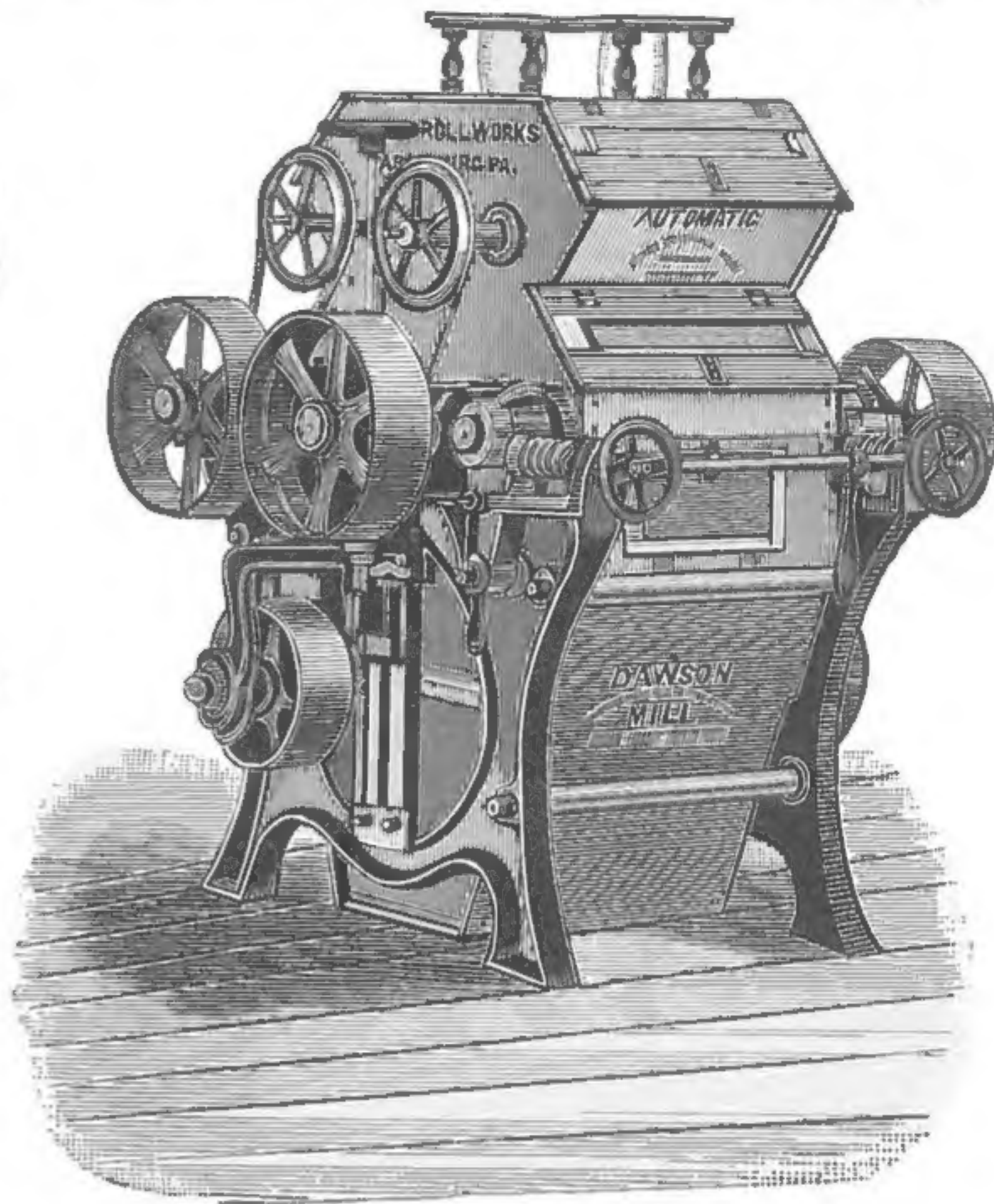
WITH DAWSON PATENT CORRUGATION.

ALL STYLES OF FLOUR MILL ROLLS RE-GROUND AND
RE-CORRUGATED WITH ANY FORM OF CORRUGATION.



We have had large and extended experience in grinding and corrugating chilled rolls for milling, and have one of the largest and most improved plants in the country for this work, which enables us to meet the most exacting requirements of the trade promptly.

ORDERS AND CORRESPONDENCE SOLICITED.



DAWSON ROLL WORKS CO.

South and Short Streets,

HARRISBURG, PA.

The Cowles "Reliable" Sectional Wood Pulley



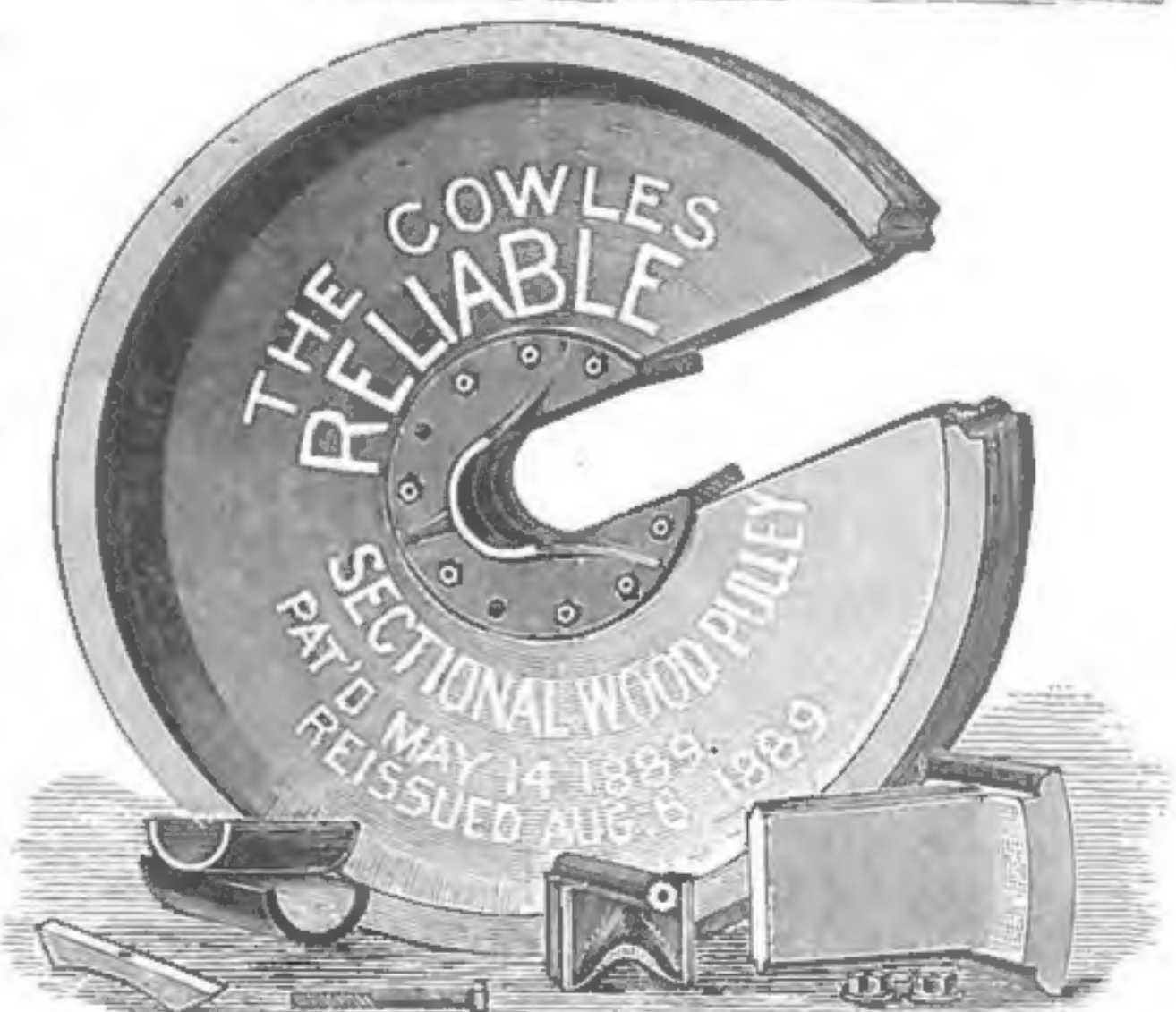
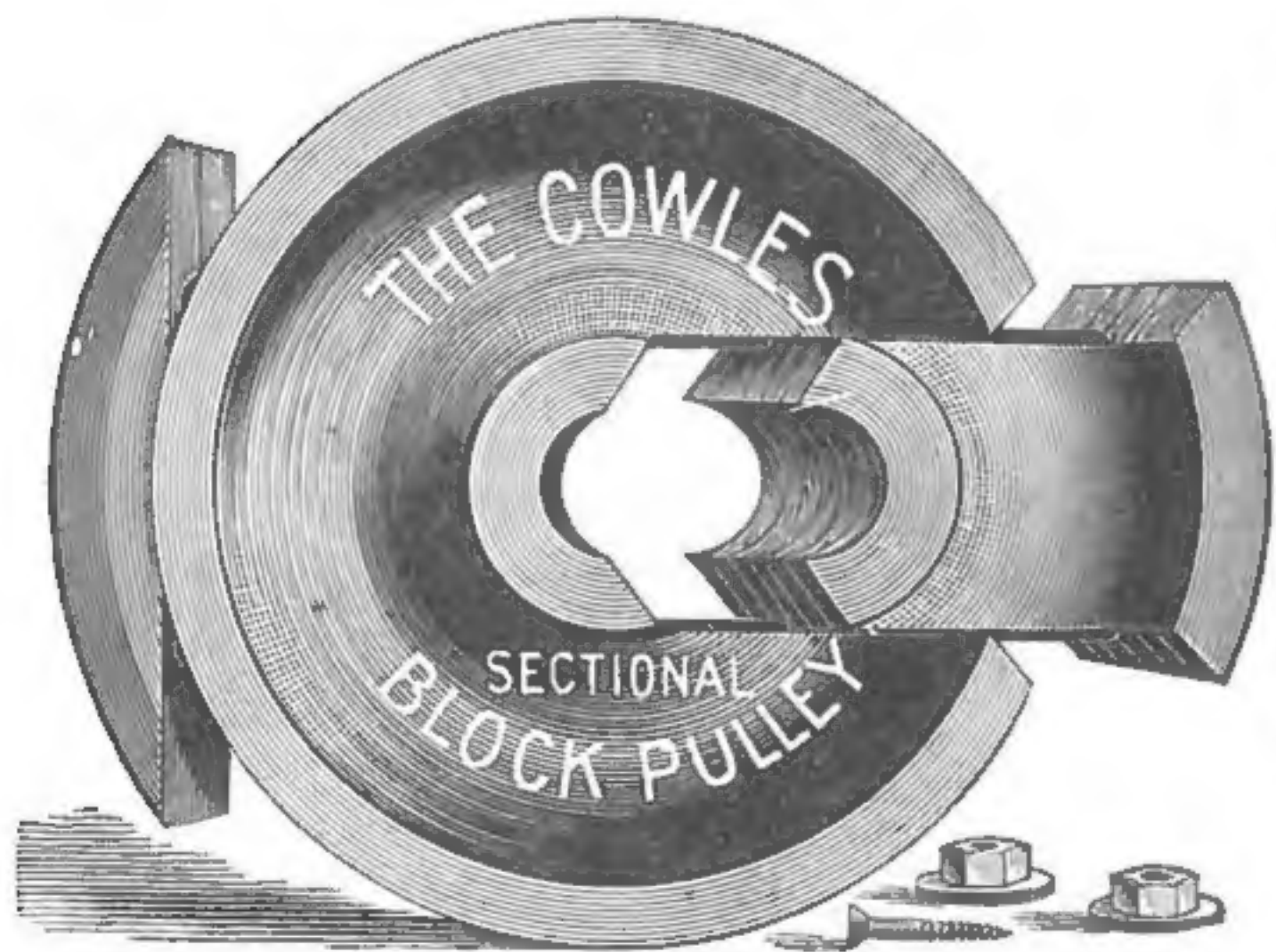
Web made of several layers glued together with grain crossing, and faced up on both sides. Iron flanges securely bolted to web. Rim put on after web has been trued up. Web and rim turned on inside and face, making perfect running pulley. Rim supported entire circumference. Positive self-gripping device for securing pulley to shafting, which is self-centering, and can not slip with wear.



A wooden rim pulley transmits from 30 to 50 per cent more power with same belt than an iron one.

Two-thirds lighter than iron, bearings will wear longer and the expense for lubricant will be less.

Having solid web, there is no air resistance. The "Reliable" can be placed on shaft or position changed in one-fourth the time required with any other pulley.



EDWARD GERMAIN, SOLE MANUFACTURER, SAGINAW, MICH., U.S.A.



PUBLISHED EVERY MONDAY. OFFICES: { Corner Pearl and Seneca Streets,
Over Bank of Attica.

McFAUL & NOLAN, - - - PROPRIETORS.

THOMAS MC FAUL.

JAMES NOLAN.

SUBSCRIPTION.

In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in un-registered letter at sender's risk.

To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year, in advance.

Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

ADVERTISING.

Rates for ordinary advertising made known on application.

Advertisements of Mills for Sale or to Rent; Partners, Help or Situation Wanted, or of a similar character One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisement taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.

Orders for new advertisements should reach this office on Friday morning to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

EDITOR'S ANNOUNCEMENTS.

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.

Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.

This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.

Address all communications

THE MILLING WORLD,
BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

SITUATIONS WANTED.

Advertisements under this head, 25 cents each insertion for 25 words, and 1 cent for each additional word. Cash with order. Four consecutive insertions will be given for the price of three.

SITUATION WANTED.

Head miller with over 20 years experience want to make a change this spring. Address, A. MILLER, 67 Weaver Alley Buffalo, N. Y. 4t

SPECIAL ADVERTISEMENTS.

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 3 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office 10 cents must be added to pay postage.

FOR RENT.

Clinton Mills, at Black Rock, Buffalo, for rent on reasonable terms, recently repaired and put in good order. Apply to CHAS. DANIELS, over 811 Main Street, Buffalo, N. Y. 6tf

FOR SALE.

One of the best paying 65-barrel roller mills in Nebraska. Nearly new, and in a locality producing a big surplus of excellent wheat. Address, A. C. PUTNAM, Chadron, Neb. 1114

PARTNER WANTED.

A man with capital to take an interest in a new 50-bbl. Roller, Flour and Feed mill. First class water-power. Every thing entirely new and in first class running order. A practical miller preferred. For further particulars address BILLINGS, RED-HEAD & CO., Avoca, Steuben County N. Y. 1215

FOR SALE.

A five run stone mill, with five water-wheels. Building 40x54, with five floors. A never-failing water power on Flint River, about 200 feet from R. R. track. Property worth \$15,000. Will sell for less than half that amount. For particulars call on or address RODGERS BROS., Genesee Village, Genesee Co., Mich. 1013.

MILL MACHINERY FOR SALE.

One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make.
One 20-Inch Under-Runner Portable Mill, French Burr Stone, capacity 10 to 12 bushels per hour; new, best make.
One 14-Inch Vertical Feed Mill; best make, new, a bargain.
One No. 6 Dustless Separator; new, a bargain.
One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.
Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.
Three No. 1 Corn Shellers, capacity 200 to 300 bushels per hour; new.
One No. 2 Purifier. New. Best make. A bargain.
One 20-Inch Portable Mill.
One 18-Inch Double Gear Portable Mill.
For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y. 5tf

FOR SALE CHEAP.

One 36-In. Iron Frame Portable Mill, French Burr Stone, Used about 2 months.
One 20-In. Vertical Mill, French Burr Stone, Used about 30 days.
Three Pair 42-In. Old Stock Feed Stones.

FOR PARTICULARS ADDRESS,

SAMUEL CAREY, 17 BROADWAY, NEW YORK.

FOR SALE.

Water-power grist and feed mill for sale, at wharf and railroad, near New York. Established business, \$4,000. J. W. ATWATER, 150 Broadway. 1417

VALUABLE ENGLISH PATENTS FOR SALE.

THE COCHRANE ONE BELT DRIVE.

The patents for England issued to the late W. F. Cochrane for improvements in roller mills. Address, J. V. TEETZEL, Hamilton, Ontario, Canada. 1316

FOR SALE, EITHER ONE CHEAP.

A circular saw planing and feed mill, 90 acres of good land, two houses, one cost \$1200, best water power in county. 43 H. P. Turbine wheels. Three miles east of Ashtabula, O.

OR.

Short systm full roller mill, capacity 2½ barrels of flour per hour, three grades. Buck wheat rig with Cranson shucker. Feed stone, &c. 40 H. P. Erie engine; locomotive boiler, all nearly new, on Main street, Ashtabula, O., two minutes walk from Post Office. Big retail trade. For particulars enquire of L. B. HOWARD, Ashtabula, Ohio. Box 488. 1013.

CANADIAN millers profess to be satisfied with the new duty on imported flour. They are reported to be prosperous now.

WHAT a love-feast the milling editors will hold in Minneapolis in June! Imagine a collision between the Chicago milling editor and the Minneapolis "Yahoo" editor! How the fur would fly! We bet on Chicago in the event of a fracas.

THE convention of the National Millers' Association in Minneapolis promises to attract more journalists, more milling-machinery men, more women and children and more outsiders in general than millers. The outside display of dodgers, advertising miscellanies and machinery will be the chief feature of the show.

WILL a one-stave barrel have equal voice with the barrel of many separate staves in voting under the proposed constitution of the National Millers' Association? Will a paper flour-sack have a vote? Unless the status of each sort of receptacle of flour is definitely settled, that barrel-vote clause, in case of adoption, may lead to serious contests in the future meetings of the "National."

WHAT is the matter with the programme of the Minneapolis convention? Why is it not published? Is the "National" incubator busted? If the convention is to be devoted to exports, burlaps and flour-barrel voting exclusively, with incidental divertissements in the line of feasting, orating and mutual admiration, the invited guests ought to be prepared by exact information. A "snap" programme sprung upon the visitors like a flash-light camera would be out of order.

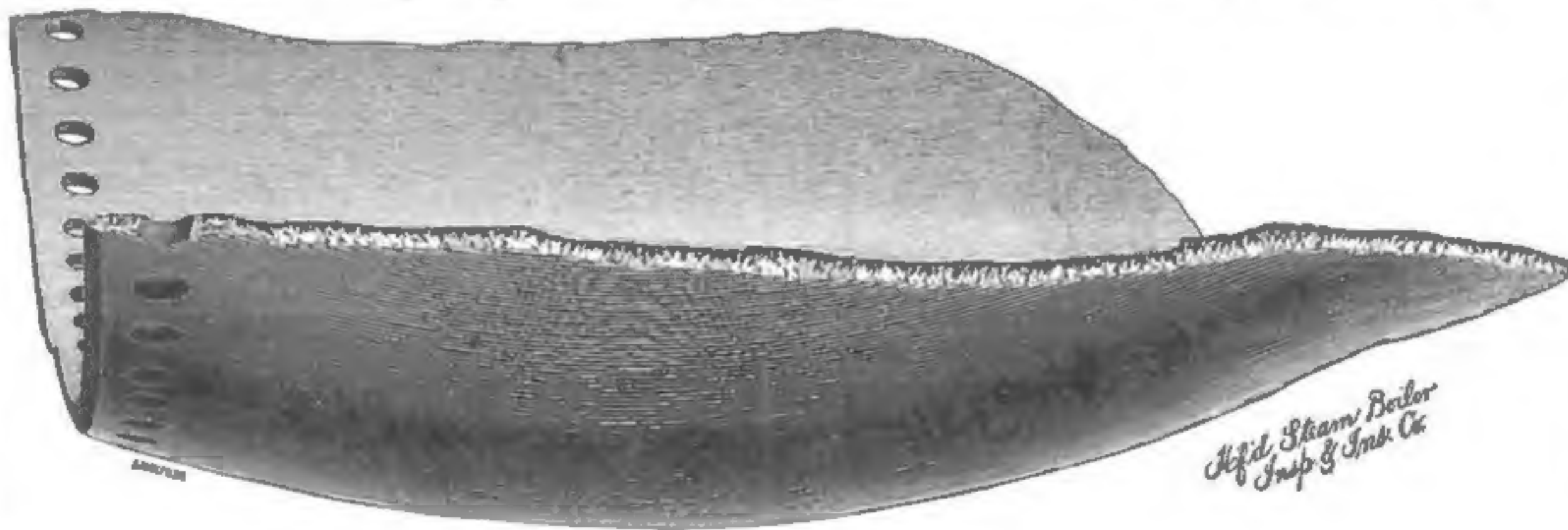
MILLING center supremacy may undergo a new arrangement in the near future, if credence be given to the report that the Minneapolis Pillsburys propose to start great flouring-mills in Kansas City. Such a movement is possible, and it would not be a bad move. Kansas City possesses many important advantages as a milling town. In the meantime it would not be a bad thing for ambitious capitalists to examine the advantages of Buffalo in the same line. This city certainly combines more advantages, such as railroad facilities, water power, low taxation, great receipts of grain and nearness to the seaboard, than any other town in the country. Millionaire millers may well cast an eye toward Buffalo.

It is not pleasant to contemplate a short crop of winter wheat in the United States, and that is what the outlook now indicates, despite the low prices ruling in the markets. Reports of widespread damage by all sorts of inflictions continue persistently to come from all quarters, and the result can not be doubted. In some sections wheat has been cut, and in many others it is about ready for harvesting. Nowhere in the winter-wheat region can the remainder of the season work much improvement to wheat, however fair and favorable the weather may be. The crop is virtually made, and it is a short one, beyond doubt. Just how short it is, no one can say yet. Nor can its quality be foretold. In most cases the reports would seem to imply something below an average in quality, but that question will be settled satisfactorily when the grain goes to the rolls for reduction and to the oven for baking. Prices must go higher.

ON BULGED PLATES.

"The Locomotive."

Our illustration this month shows a section of sheet that was recently removed from a large newspaper office. The exhaust steam from the engine was used for the purpose of heating the building, and all returns from the heating system, as well as the drips from the engine, were carried back to a tank and from there pumped into the boilers. A heavy animal oil was used for lubricating the cylinder of the engine, and the feed-water in its natural state contained a considerable amount of vegetable matter. The organic matter thus carried into the boiler could not all be removed, for the blow-off pipe did not enter the drum at the lowest point, as it should, and a considerable quantity of water and oily matter could not be blown out. Hence any deposit that might lodge on the bottom of the shell remained there and was burned on, forming a coating that prevented the water from coming into direct contact with the iron. The sheet thus protected from the cooling effect of the water got overheated, and the steam-pressure within the boiler caused a bulge at the softened spot, as shown in the cut. The boiler from which this piece was taken was made of the best of material. Otherwise it would probably have fractured, rather than come down as much as it did, and an explosion would have been the result. Of course it is not necessary to have oil in the boiler, in order that bulging may result. A deposit of scale on the fire-sheet often causes a noticeable bulge in the plate, even when the scale has fallen down from the tubes and is lying in a loose heap. It is generally admitted that a coating of oil or scale will cause a plate to bag, but it is not always understood that a very slight coating is frequently sufficient to bring about this result, especially in the case of oil. A coating of oil that might escape the attention of the inexperienced will often cause a bad bulge if allowed to remain. Loose scale is, of course, not so bad, since it allows more or less water to circulate through it, and the plate can not so readily become excessively overheated. It should be understood that the foregoing remarks on the danger from oil apply to the heavy oils, such as are used for lubrication, and not to the more volatile ones, such as kerosene. The lighter ones volatilize and pass off with the steam, while the heavy ones decompose and bake on the sheets. Kerosene, in fact, is sometimes purposely introduced into boilers to loosen up scale; though it never should be so used without the exercise of care and judgment.



A BULGED PLATE.

CONTRACT WHEAT IN NEW YORK.

Some time ago a petition was circulated on the New York Produce Exchange asking that No. 1 northern spring wheat be admitted as a good delivery on contracts. A meeting of the grain trade was held to consider the question, and as it was found that no immediate agreement could be reached, the matter was referred to the grain committee, who were instructed, in connection with a special committee appointed to confer with them, to render a report on the subject. The committeemen have had several meetings and have been unable to agree unanimously. Consequently two reports are submitted, and the grain trade will now be called upon to decide the question for itself.

In their report the majority of the joint committee say: "The joint convention have to report in favor of the proposition to make No. 1 northern spring wheat a tender upon contract, because they believe it would considerably increase the business of this Exchange and greatly benefit the grain trade of New York. New York has unsurpassed facilities for handling and storing wheat and, owing to its geographical position, is the natural outlet for that portion of the crop

which is exported, and would unquestionably command the trade if we offered the same inducements that are offered by competing markets. The quantity of winter wheat available for export becomes smaller each year, owing to the increasing population of the States where it is grown, while spring wheat is produced in new States with small population, and the bulk of the crop has to be forwarded to market.

"The millers in New York and in most of the important European markets are now equipped for grinding No. 1 northern spring wheat and would use a much larger quantity of it if they could always buy it when they want it. No. 1 northern wheat sells as much over the price of No. 2 red, on the average, as No. 1 hard wheat did when it was made a tender upon contract. Although New York is obviously the best market for wheat grown in the Northwest, a large quantity of it is diverted to Chicago, because the holders of it are accustomed to sell there against their purchases. No. 1 northern wheat, being much superior to the Chicago grade of No. 2 spring wheat, is deliverable upon contracts there, and in case of a manipulated market the seller in Chicago can limit his loss by shipping his wheat to Chicago and delivering it on his sales. If the holders of Northwestern wheat could sell as safely in New York, they would undoubtedly prefer to do so, and the wheat would tend to come to the market in which it had been sold for future delivery, but under existing conditions they are afraid to consign, with contract wheat sold against it.

"The trade in New York are afraid to buy any considerable quantity of No. 1 northern and bring it forward to the seaboard with contract wheat sold against it, because the premium which they have to pay to get that wheat would be absorbed in the event of its meeting a manipulated market, owing to the scarcity of the contract grade, and as there is at present no provision for tendering it upon contract, there is no limit to the loss which they might sustain. The cost of carriage from the point of production in the Northwest to Chicago, which must be by rail, is about the same as the cost of transportation to Duluth and thence by water routes to New York. It will, of course, be generally conceded that the same wheat is worth more in New York than in Chicago, and therefore the holder of wheat in the Northwest would prefer to market it in New York, where he can get the higher price. With this advantage we will naturally control the business if we make it a delivery on our contracts.

"The joint committee favor the adoption of these rules, with a strong confidence that they will materially increase the stocks of wheat in New York, which will of course, be of great benefit to the trade, since with small stocks we must have a narrow market, a light trade for export and a small milling business; but a large stock means large export demand, large milling demand and active trading for future delivery. The objection that the grade of No. 1 northern wheat might be lowered is met by the change in the rules which makes it impossible for the grade to be changed except at a meeting of the grain trade held for that purpose. The millers of New York are unanimous in the opinion that No. 1 northern wheat, bushel for bushel, gives a better yield and is of greater intrinsic value than No. 2 red winter wheat, and that at the same price they would always give it the preference; and since the mills in the most important markets of Europe are now equipped with the requisite machinery for grinding hard wheat, exporters will continue to give this wheat the preference, and at no time in the future would it undersell No. 2 red winter wheat, were the latter deprived of its present advantage of being deliverable on contract. It is not fair to compare the commercial values of two grades

of wheat when one has an advantage of privilege which the other has not. It is admitted that if there were large stocks of both No. 1 northern and No. 2 red in the New York market, the export and milling demand would first exhaust the stock of No. 1 northern at a higher price than the No. 2 red would bring, and if this be the fact, it is conclusive proof that the commercial value of No. 1 northern, under normal conditions, is higher than that of No. 2 red. No. 1 northern has sold at a discount only on one or two occasions, when the No. 2 has been scarce and the market well nigh cornered.

"Your Committee would not have favored this measure if they had not, after exhaustive discussion and investigation, become convinced that No. 1 northern wheat is intrinsically and commercially worth more than No. 2 red winter wheat, and that this action on the part of the trade will not divert from our market any No. 2 red winter wheat which is naturally tributary to it, but rather tend to attract more, and will draw a very large amount of the surplus wheat of the Northwest that is now diverted to other markets. Our investigations satisfy us, and we are assured by the warehouse men, that this wheat can be kept in store as safely as No. 2 red winter wheat. It is claimed that an extension of the contract grade would favor short selling, tend to depress prices and work to the disadvantage of the buyer, but this is answered by the fact, which is admitted by all, that Chicago, where every bushel of red wheat, whether spring or winter, grown in this country, grading No. 2 or better, is deliverable upon contracts for future delivery, has attracted the business from other competing markets and is conceded to be a market which favors the buyer. When wheat is moving freely, we have our best markets, and the heavier the sales made here against wheat at the receiving centers or coming forward to New York, the quicker the response to any news favoring a bull movement. Your committee have also to propose the adoption of a rule providing that, when any contract wheat is posted, the loss will not fall upon any special holder, but be distributed over all the contract wheat pro rata. The effect of this will undoubtedly be that the entire trade in wheat will be interested in having it kept in condition, while the risk of posting will be reduced to a minimum. It will also entirely remove any feeling which an outside dealer in wheat may have that he is at a disadvantage compared with the members of our Exchange. All the holders of certificates will be thus placed upon the same footing, and no one will have the slightest advantage over the other. A man holding one load of wheat will be in exactly the same position relatively as the man holding a hundred loads."

The minority report is as follows: "The undersigned, members of the joint committee, are not in favor of making No. 1 northern tenderable as contract wheat on the same terms as No. 1 hard. No. 1 northern has sold in Duluth on an average of about three cents below No. 1 hard, often four cents below and sometimes at a larger difference. They do not think it fair to the buyer of our contract wheat that he should be compelled to accept at the same price wheat that can generally be bought at three cents less than what Duluth can now deliver on our contracts. There may be a difference of opinion as to the intrinsic value of No. 1 northern compared with No. 2 red, but to the buyer of contract wheat it is not the intrinsic value, but the market value, and the market value only, of the wheat at the time it is delivered to him that he is concerned about. As no No. 1 northern will be ever tendered on contract unless its market value be less than No. 2 red, the buyer will be put into an unfavorable position whenever No. 1 northern is tendered to him. As No. 1 hard has been tendered on contract, and will be tendered again whenever the same circumstances make it advisable to the seller, it follows that if No. 1 northern can be tendered, the buyer in such case will be damaged to the extent of the difference between the value of No. 1 northern and No. 1 hard.

"The proposed amendment would, therefore, tend to unsettle the basis on which buyers of contract wheat now operate, and the position of buyers for consumption and export requiring the No. 2 red, who now can safely hedge by buy-

ing the contract wheat, will be jeopardized, inasmuch as they would be liable to have to pay a considerable difference to get the No. 1 northern exchanged for No. 2 red. A great many other objections could be urged against the proposal, such as it is, to make No. 1 northern tenderable on contract, nor is it clear to us that the adoption of the proposal would bring about the benefits claimed by the majority of the committee, in view of the fact that nearly all of the No. 1 northern available for this market already finds its way here. While, therefore, they oppose the proposal of the majority, they think its advantages would be greatly lessened and all possible benefits be equally secured if No. 1 northern were made tenderable at about such a difference in price as the Duluth market itself has generally established between No. 1 northern and No. 1 hard. We recommend, therefore, that No. 1 northern be made tenderable as contract wheat at a difference of three cents a bushel below the price of contract wheat, and recommend, in connection therewith, the adoption of the other proposals of the majority of the committee."

OBITUARY.

Mr. Henry Little, of Kalamazoo, Mich., died in that city on Sunday, May 25, at the age of 93 years. Mr. Little was a well-known mill-wright, machinist and master mechanic. He was born in Cambridge, N. Y., April 59, 1797, and lived there until 1800, when his parents settled in Danville, Vermont. He began business in St. Johnsbury, Vt., in 1815. He was married to Miss Ruth Fuller, of Wilbraham, Mass., on March 11, 1822. His wife died February 8, 1888, in Kalamazoo. Mr. Little materially aided Messrs. E. & T. Fairbanks in planning and perfecting their famous scales. He moved to Michigan in 1831, where he finally settled in Grand Rapids in 1838. In the succeeding years he built flouring-mills at Yorkville, Paw Paw and Kalamazoo. In 1863 he moved to Kalamazoo, where he lived the rest of his life. He was a man of sterling parts and character, intelligent, self-reliant, benevolent and upright. Three sons survive him, Albert, William Henry and Frank, the last named being widely known among the millers of the United States as a former secretary of the Millers' National Association.

COTEMPORARY COMMENT.

Owing to almost constant rains which have prevailed since May 1 in central New York State, the farmers are well-nigh discouraged. Upon the hills and highlands the soil is so saturated that it is like mortar, sown seed has rotted in the ground and further seeding is impossible. In the valleys, meadows and cultivated fields are under water and no farm work can be done.—*New York "Produce Exchange Reporter."*

Prime's crop map shows that the oat crop in the Niobrara mountains, North Nebraska, is making very poor progress. How it is doing in the Gogebic range he neglects to state.—*Chicago "Daily Business."* He is equally and ominously reticent about the wheat prospect in the Chicago prairies recently annexed.

Fall wheat throughout Ontario presents a more than usually uneven appearance, even in the same township. In the west seeding was delayed late into the fall on account of the drouth, and the acreage is consequently somewhat reduced. When winter set in the crop had hardly made sufficient headway to stand the alternate freezing and thawing, and there was not enough snow to protect the young plants. The western crop suffered more or less from winter-killing. Many farmers are harrowing spring wheat into the bare patches among the fall wheat. Little or no damage is reported from worms or insects of any kind. The recent rains have improved the prospects, but the crop is backward on account of the cold weather experienced after the snow went. A favorable season from this out will give a fair, although not a large, fall wheat harvest.—*Montreal "Journal of Commerce."*

The northwest wheat prospect is for a good crop and more than likely a large one. It will be wanted, as the winter-wheat crop is short. Of course people will say accidents may make ours a short crop too, but no one can consistently

claim that accidents may make the winter-wheat crop a big one. So it would seem that higher prices than prevailed last year would be due, if they depended entirely upon the home position. But they do not. We will still have, under almost any conditions, a surplus to export. The price it will bring in wheat or in flour will largely determine the prices that may be expected at home.—*Minneapolis "Market Record."*

The tone of the foreign press indicates that they think the speculators in the United States are overdoing the crop damage business.—*Chicago "Daily Trade Bulletin."*

A WHOOP FROM BOOMDOM.

Concerning the capabilities of the Argentine Republic a Buenos Ayres correspondent writes: "The single province of Buenos Ayres is larger than the United Kingdom of Great Britain and Ireland. It is the Empire State of the Argentine Republic. It consists almost wholly of the great plains known as 'The Pampas,' an unbroken plain 121,000 square miles in extent. In 1875 there were 825,492 acres cultivated and now there are 5,899,895 acres, mainly in wheat, but amazing as the ratio of increase is, there is only 1 per cent. of the entire area under tillage. About 120,000 square miles would suffice for the production, at our standard per acre, of 500,000,000 bushels of wheat and 7,000,000 bales of cotton, with one-third of the land even then left over for other purposes. The condition of these great grassy plains, lying close to a navigable river in a salubrious climate, where Europeans can work energetically and effectively, may be imagined from the further fact stated by a correspondent, that there were on these plains in 1888 about 23,000,000 cattle, nearly 4,500,000 horses, and over 70,000,000 sheep, more than half credited to this particular district."

MILLING PATENTS.

Among the patents granted May 27, 1890, are the following:

Wm. D. Gray, Milwaukee, Wis., No. 428,674, a middlings-purifier, containing the combination of a casing and sieve or screen, a spout to receive the tailings of the screen, an elevator located in position to receive the tailings from said spout, a hopper arranged to receive the material carried up by the elevator, a series of inclined shelves or boards beneath the hopper, an air-trunk communicating with the sieve-chamber and shelf-chamber of the casing, and a fan communicating with the trunk, and serving to cause a current of air through the sieve and between the boards and shelves, the sieve, elevator, or shelves being arranged within one casing; in combination with the casing and sieve or screen of a middlings-purifier, an aspirating attachment arranged to receive the tailings from the sieve and provided with discharge-spouts, one communicating with the middlings-trough and the other with the tailings-trough of the casing; in combination with the casing and sieve of a middlings-purifier, middlings-trough and tailing-trough, extending along the lower part of said casing and projecting beyond the same, and an aspirating attachment provided with discharge-spouts communicating, respectively, with the troughs; in combination with the casing and sieve of a middlings-purifier, an aspirating attachment consisting of a casing provided with elevator-trunk and elevator hopper, inclined boards spouts to receive the material from said inclined boards or shelves, a fan, and an air-trunk communicating with the casing and with a fan; in a middlings-purifier, the combination of a casing divided into two chambers, a sieve located in one of said chambers, an aspirator, a hopper at the head of the aspirator, and an elevator located between the tail of the sieve and the hopper in the second of said chambers, a fan, an air-trunk communicating with both of the chambers of the casing, and a conveyer-trough and conveyer also common to both chambers.

Wilhelm Hahn, Neumuehle, near Eutin, Germany, No. 428,719, a sieve, containing a combination of compartments having sifting-surfaces inclined alternately in opposite directions and forming steps with smooth inclined surfaces, conveying the material from the highest point of one incline to the lowest point of the other, whereby a continuous

circulation of those coarse objects which do not fall through the meshes is produced.

Eugene Decollogne, Paris, France, No. 428,768, a feed-regulator for grinding-mills, containing the combination, with the hopper, of shafts passing through the hopper and the sides thereof, one of said shafts being mounted in fixed bearings and the other in adjustable bearings upon the outside of the hopper, whereby the latter shaft may be adjusted toward and from the fixed shaft, grooved rollers mounted upon said shafts, the rollers upon the fixed shaft being of large diameter and the roller upon the adjustable shaft of relatively small diameter, a gear-wheel mounted upon one end of the fixed shaft, and a gear wheel of relatively large diameter mounted upon one end of the adjustable shaft and gearing with the other gear-wheel, and means for rotating one of said shafts.

Eugene O'Brien, Liverpool, County of Lancaster, England, No. 428,816, an apparatus for weighing grain, containing the combination of a scale-beam, a weighing-receptacle, a partition therein dividing said receptacle into a larger and a smaller compartment, a hopper, a main door communicating between the larger compartment and the hopper, a discharging-door for said receptacle, a locking device for the scale-beam, connected by a rod with said main door, to be released by the closing thereof, a smaller door communicating between said hopper and the smaller compartment, connected by a rod to said discharging-door, whereby it is automatically closed when said discharging-door is opened.

Carl Haggemacher, Budapest, Austria-Hungary, No. 428,907, an apparatus for sifting and sorting meal, No. 428,908, a chop-grader, and No. 428,909, a sifting-machine, comprising a frame having a gyrating motion and provided with guides in line with the desired main direction of travel of the material, and cross-slats extending part way across its surface between said guides, for causing the material to travel over the said surface; the combination, with a frame-box provided with an inlet at its upper and outlets at its lower part, of rods pivotally supporting said box, a revoluble device, such as a crank, for imparting a continuous gyrating movement to said box, and a frame supported in said box and provided with a perforate sifting-surface and with guide-slats and cross-slats arranged on said surface; the combination, with a horizontally-gyrating frame-box, of the series of frames superposed one above the other in said box, some of said frames being provided with perforate sifting-surfaces of various fineness for sifting and grading the material, and these frames being further provided with openings for the introduction and discharge of granular cleaning substances adapted to mingle with the material being operated on, and others of the said frames being provided with imperforate conveying-surfaces, and all of the said frames in the series being provided with guide-slats and cross-slats for causing the material to travel over their surfaces.

SUGGESTIVE JUXTAPOSITION.

Prophets generally do not like a juxtaposition of predictions and issues, of guesses and facts, for the simple reason that the predictions and guesses generally disagree totally with the issues and facts. Guessing prophets, like "Bradstreet's" and S. T. K. Prime, generally succeed in getting on the wrong side. Prognosticator Prime is well known as the boss Prognosticator Errant, and he is not going to lose his fame so long as he has pens, ink and paper on hand. In his last crop letter, in speaking of North Dakota, he says: "Little snow fell during last winter over this section, and the rains which have fallen have been quickly absorbed. A few days of windy weather and sunshine will leave the ground as dry as ever."

Evidently that was the way things looked in Dwight, Illinois, where Prognosticator Prime prognosticates, but the real condition in the Dakotas at the same time were as set forth in the following dispatch from St. Paul, Minn., dated May 23: "More water has fallen on the two Dakotas during the last three days than during any similar period for three years. From a careful examination of signal service reports,

special telegrams and weather reports received by the Great Northern and Omaha railroads, it is safe to say that between the Missouri and Mississippi rivers there is not a foot of dry ground to-night. The greatest amounts of rain-fall have been in the northern part of North Dakota and the southern part of South Dakota, but all places in the two states have received enough rain to dispel any fears of injury to the wheat crop by drouth for the next three weeks at least. The rain-fall in Minnesota was heaviest in the extreme limits of the state, but has been pretty well distributed, and is believed to have touched all points. The temperature is steadily rising in the west, and the prospect is that the weather will grow warmer for two or three days."

Probably the disagreement between Prognosticator Prime and Dakota Realities will not disconcert the Prognosticator. It is not the first time his imaginings have snagged on realities. Since no intelligent traders place any dependence on such stuff as Prime and "Bradstreet's" send out as crop reports, the present failure to get things within Krupp cannon range of the reality will not count for much.

THE TROUBLES OF EXPORTERS.

A dispatch from Fargo, North Dakota, dated May 27, says: The North Dakota Milling Association has been holding another session here and the members complained bitterly about the length of time taken for shipments of flour to Great Britain. The general freight agents present threw the blame upon the steamship companies. The question of freight rates also came up for some vigorous discussion, the rate from Bismarck to Duluth, for instance, on one road being the same as that from Duluth to London on four roads and an ocean steamship line namely, 30 cents per 100 pounds. Reports received from the London agent were encouraging, better prices even being received than were expected. A proposition has been made by an English syndicate to purchase the 21 mills belonging to the association, but action was postponed until the next meeting, which will be held in Minneapolis, June 16.

THE MISTAKE OF THE FARMERS.

The Secretary of the Kansas Board of Agriculture has been making an investigation of the cost of producing the different farm staples in that State, and his figures, based upon reports from every county, form an interesting and instructive contribution to the discussion of the most important of current industrial problems. He finds that the cost varies in different localities, owing to the difference in the yield per acre and in the rental value of lands. Taking the State as a whole, the average cost of growing a bushel of wheat is 50 cents and of corn 21 cents. The bulk of both of these products for several years past has been sold at prices below these figures. Thus it requires no labored process of arithmetic to show that the Kansas farmers who have been raising wheat and corn have lost money; and the same is true regarding the farmers of Missouri and Illinois, Iowa and

Nebraska. In certain sections of all these States these crops have yielded a fair profit; but generally speaking they have not paid expenses. This presents the whole situation at a glance, as far as the two leading western staples are concerned.

It is said that the farmers of Hitchcock county, Neb., having sold all their corn, are now importing corn for feed and seed at 20 cents a bushel.

The Attica Mills, Attica, N. Y., have been sold to Joseph Bork, of Buffalo, N. Y., who traded Buffalo east-side real estate towards the purchase price. The party who owned the mill is a resident of New York and preferred to have real estate in Buffalo, where it was sure without so much personal supervision to be a paying investment. Mr. Bork says he bought the property for one of his sons and as soon as the full details of the sale have been completed will make plans for the future in regard to the mill. The capacity of this mill is from 200 to 300 barrels per day and is fully equipped with all approved appliances. The price paid is not stated.

CATARRH.

CATARRHAL DEAFNESS—HAY FEVER.
A NEW HOME TREATMENT.

Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been formulated whereby catarrh, catarrhal deafness and hay fever are permanently cured in from one to three simple applications made at home by the patient once in two weeks.

N. B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of stamp to pay postage, by A. H. Dixon & Son, 337 and 339 West King street, Toronto, Canada.—*Christian Advocate*.

Sufferers from Catarrhal troubles should carefully read the above.

SPECIAL NOTICES.

BOLTING CLOTH.

Do not order your cloth until you have conferred with us. It will pay you, both in point of quality and price. We are prepared with special facilities for this work. Write us before you order.

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Practical Notes

A NOVEL SOLDERING IRON.—A soldering iron has been invented by a German, which contains a chamber into which and from which fluid solder may be drawn and forced by pneumatic action.

GENERAL NOTES.

At Torrelagorda, Cadiz, a Maxim automatic rapid firing gun, weighing about 300 pounds, threw projectiles weighing something over one pound at the rate of 50 shots in 10 seconds. In a high wind it put 47 shots out of 50 in a target 1,800 feet distant. Afterward it fired 50 explosive shells in 10 seconds at 6,000 feet range, and a dozen shots pierced the target.

SENTIMENTAL.

'Tis sweet to hear the watchdog's honest bark,
Bay deep-mouthed welcome as we draw near home;
'Tis sweet to know there is an eye will mark
Our coming, and grow brighter when we come.

—BYRON.

PRACTICAL.

'Tis wheat to hear the honest broker cry:
"One dollar now for July wheat I'll pay."
'Tis wheat to know that you can fill him up
With what cost eighty cents the other day.

—B. P., Chicago "Daily Business."

'Tis suite to play one little game too oft,
To lose the pot at last on snap too soft;
'Tis suite to fodder "lambs" on wind-blown wheat,
To find the "bull's" financial winding-sheet!

—BANG.

POINTS IN MILLING.

CONFLAGRATIONS are costly things for millers, and it is small wonder that the fire record for 1889 is causing endless comment among mill-owners and insurance men. According to recently published figures, the mills burned in the United States and Canada last year included 87 flour-mills, worth \$3,200,000; 16 grist-mills, worth \$130,000; 6 corn-meal mills, worth \$68,000; 3 oatmeal mills, worth \$115,000, and 2 feed-mills, worth \$4,000, a total of 114 mills, worth \$3,517,000. The total amount of insurance on these burned establishments is set down at \$591,600, so that there was a clear loss to the owners of at least \$2,925,400. In view of such figures the value of all suggestions concerning prevention of fire in flouring-mills is evident. I have repeatedly insisted that insurance covers only a part of the loss at best, and these official figures show how small that part really is, and how true is my oft-repeated statement that "the miller can not afford to burn out."

COMMENTING on the conflagration topic, a circular letter sent out recently by the Indiana Millers' Mutual Fire Insurance Company gives the following warnings, which every miller should read and heed: "First. The value of a good supply of barrels and buckets of water at accessible places throughout the building. If barrels of water with buckets are handy in all parts of the mill, they may save a destructive fire. Second. The necessity of positive instructions to employes to make a careful examination of every fast-running journal in the mill within from three to five minutes after shutting down, and if a hot journal is found, to see that it is cool before leaving. It is an established fact that a hot journal will not ignite as long as it is kept running, but will do so directly after machinery is stopped. Too much care in this direction can not be exercised. Third. Experience has demonstrated that a wood-split pulley will cause fire if not closely watched. The bolts in these pulleys become loose, and the pulley will slip on the shaft and is liable to

cause fire. Every bolt in these pulleys should be tightly drawn every time the mill is shut down, and thus prevent this danger. Fourth. Elevator heads should be closely watched and regularly cleaned. Far more fires originate there than millers generally suppose. Conveyors as well need close attention, and should be kept running free. Every conveyor box should have a loose lid that will shove off in case of choke up. Fifth. Above all things else, a mill should be kept clean, for fires will originate easier and spread more rapidly in a dirty mill than in a clean one."

SOME of these statements may be open to question, but most of them are safe and sound. Of course, the light in which the insurance man views a mill is the same as that in which the owner of the mill views it. The insurance man can not afford to have the mill burn, because he must pay the amount of insurance if it burns. The miller can not afford to have it burn, because he must lose the difference between the insurance and the actual value of the plant. With their interests identical, both the insurance man and the miller fail to do what they might do to prevent disastrous fires. The insurance man does not force the miller to exercise a saving vigilance, and the miller fails to exercise it of his own will. The result is scores of "mysterious" fires, breaking out at midnight, or at any other unearthly hour, and both the insurance companies and the mill-owners suffer loss that might be avoided.

MY advice to every miller is to stop kicking against the insurance men's regulations and to take common-sense precautions against fire. The insurance companies are not in business for mere pleasure or mere philanthropy. They wish to make money. They have the right to exact care and vigilance from the men whose property they insure. If millers will refuse persistently to be careful, they must go on paying high rates on the small portions of their property which the companies will insure, or incurring risks of total loss on plants which the companies will not touch at all. I see more and more the carelessness of millers and mill-helpers as I go about among the flouring-mills of the country, and I confess that my sympathies are strongly with the insurance men.

EVERYWHERE I find millers bewailing the utter lack of organization that may be seen in the fraternity of flour-makers in the United States. Well, whose fault is it? The millers who form a local association and allow it to be lifted into a state, and then into the so-called "national" association, where it dies of dry-rot and benefits nobody, have only themselves to blame. Organization would be a good thing for millers, in every way conceivable, if properly accomplished and properly manipulated. The trouble has been, and seems to be at this time, that the organizations are switched off from their legitimate tracks about as soon as they are formed. Instead of paying attention to the most essential things connected with their business, the small millers, for example, are found devoting their time to a general organization that ignores the small miller, that is concerned in outside matters that do not directly touch the small miller, and that merely use the millers to give a show of importance to the transactions of the larger body. My idea is that a State association ought to be maintained in each important milling State, entirely free from all connection with the so-called "National" association, in which every detail of practical milling, buying grain, grinding systems, mill equipments and kindred subjects might be fully discussed at regular stated meetings. The province of the National Association is somewhat different, and a really "national" organization might be depended upon to do general work, to secure legislation where needed, and to do all that is required to advance the interests of the whole milling industry. Two kinds of associations are plainly needed, and until the natural division of interests is made the basis of organization, the millers will go on bewailing the lack of real co-operation to defend, to advance and to elevate their aggregate interests.

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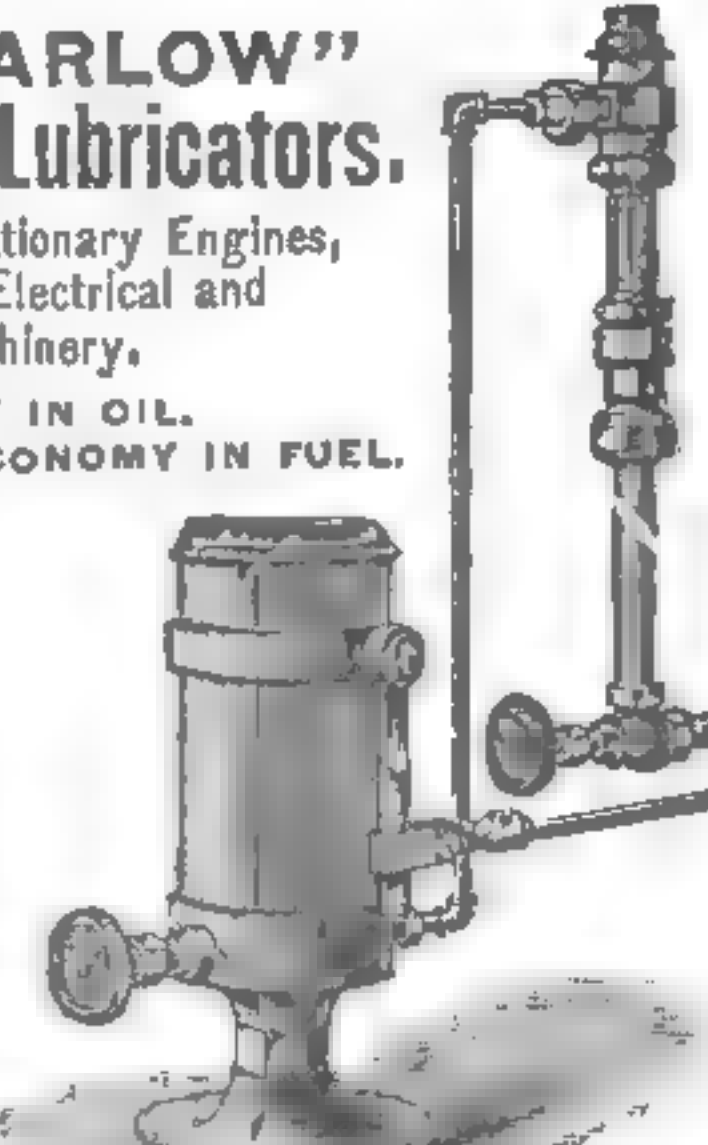
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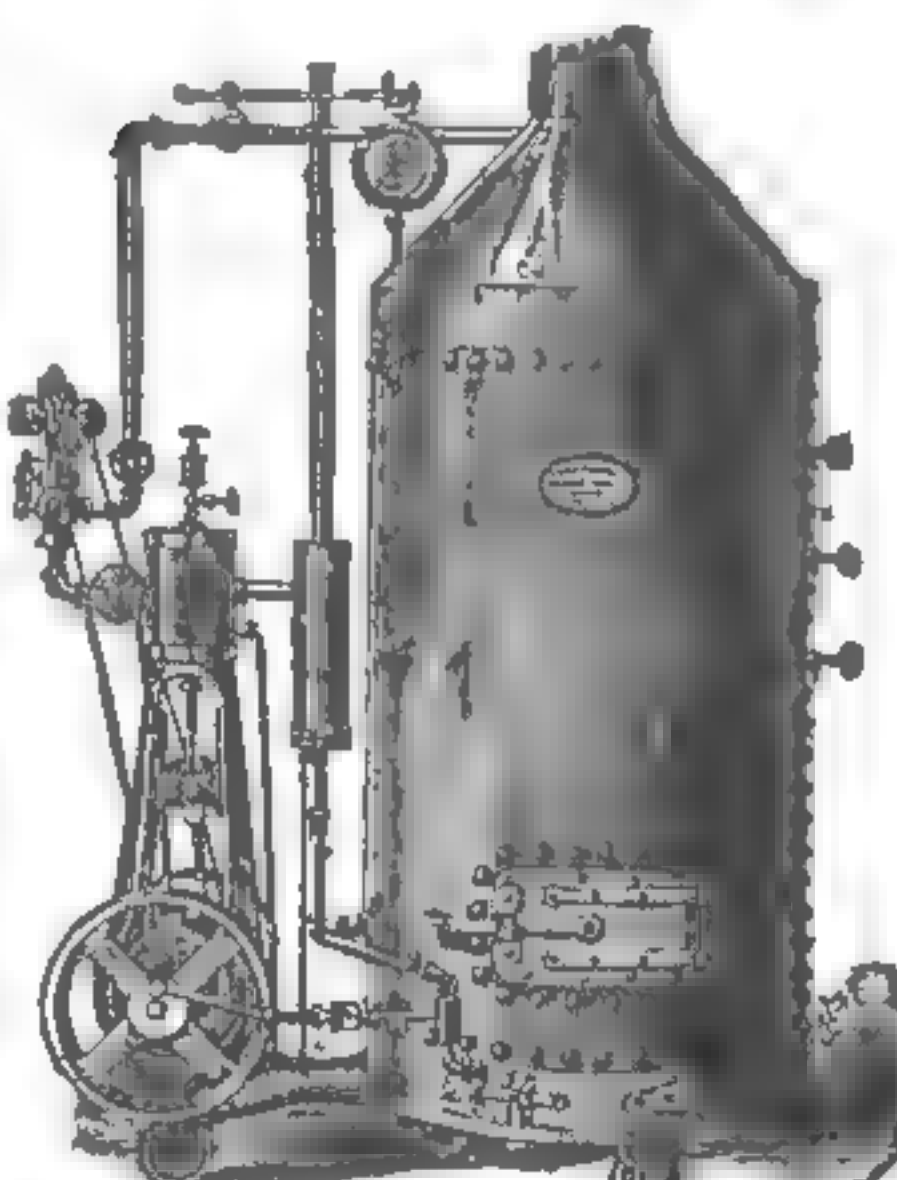


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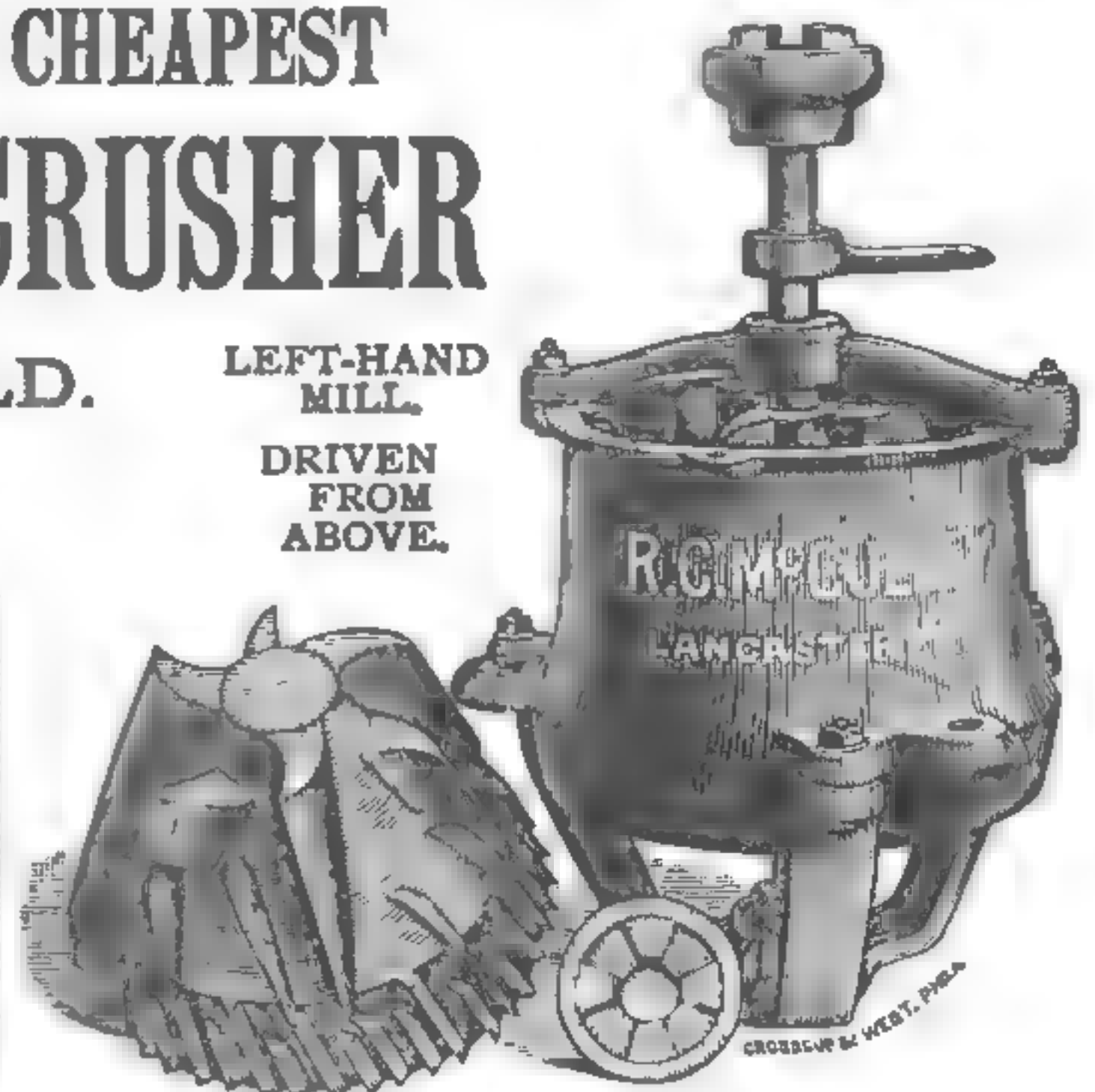
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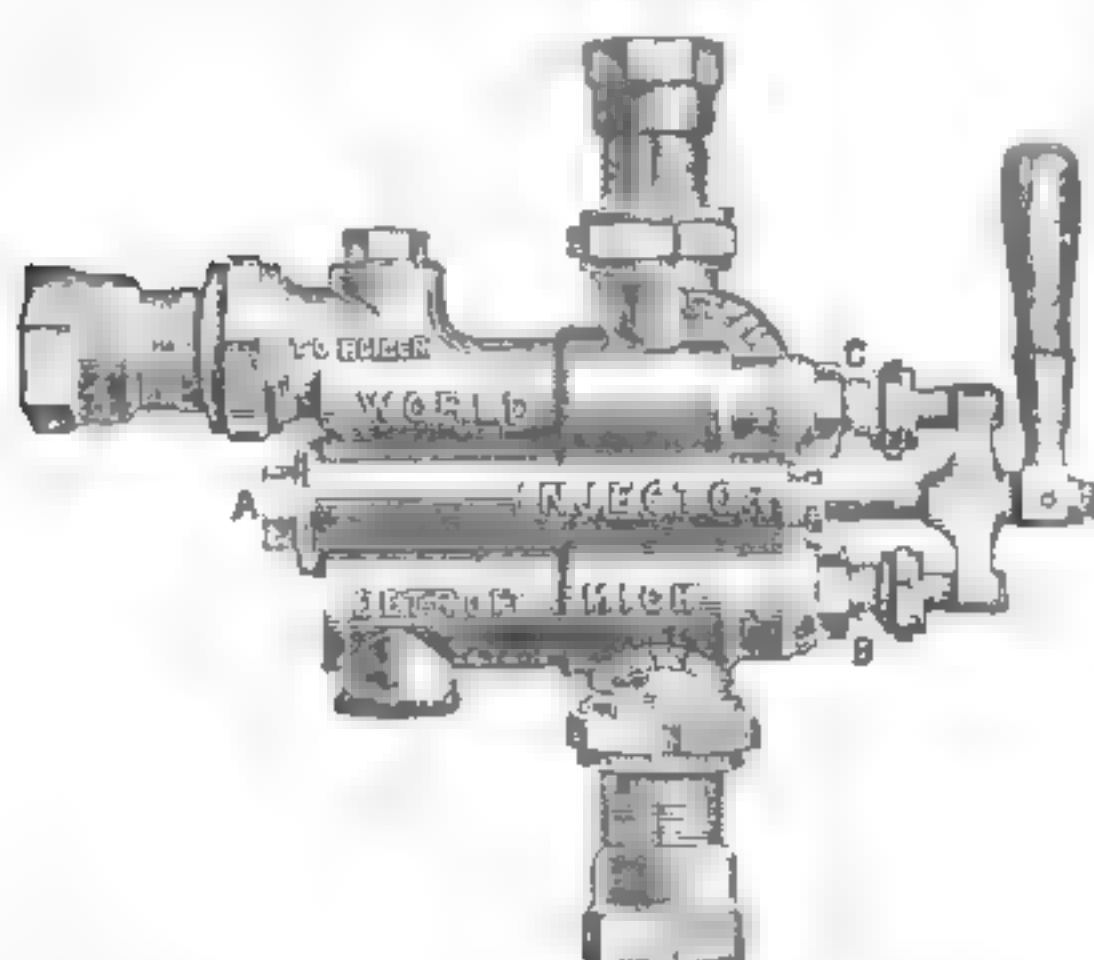
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AMERICAN INJECTOR COMPANY,

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Bath, Me., men will start a grist-mill.
 A. D. Ellsworth, miller, Winona, Minn., is dead.
 S. Kennedy, Charleston, W. Va., builds an elevator.
 J. S. De Montmollin, Middleburg, Fla., built a grist-mill.
 W. T. Elliott's grist-mill, Winfall, Va., burned; loss \$1,000.
 John H. Bushong, grist-mill, Lancaster, Pa., sold to Jacob L. Bushong.
 E. L. Haughton, Pittsboro, N. C., is building a 40-barrel roller-flouring-mill.
 C. Snodgrass, Thomasville, Ga., increases grist-mill capacity; he wants machinery.
 Portland, Ore., men have incorporated the Suffolk Mill Co., to build a flouring mill.
 W. E. Brown & Son, Stevenson, Ala., will build a flouring-mill in Sulphur Springs.
 The Vienna Improvement Co., Vienna, Ga., will build a grist-mill; machinery is wanted.
 Robert Swim's flouring-mill, Doaktown, N. B., Canada, burned; loss \$20,000; insurance \$12,500.
 Elizabeth, W. Va., men formed the Elizabeth Flouring Mills Co., to operate the J. P. Badger flouring mill.
 D. G. Smith and others, Quanah, Tex., incorporated the Quanah Roller Mill Co., capital stock \$11,000, to build a flouring-mill; machinery is wanted.
 J. H. Knox and W. L. Welch, Houston, Tex., propose to form a \$100,000 stock company, to build a roller flouring-mill of large capacity. They want machinery.
 Kehler Bros.' Laclede Flour Mills, St. Louis, Mo., burned; the fire is mysterious, as the mill was idle and was being remodeled to rolls; loss \$125,000; fully covered by insurance.
 According to a statement of the Secretary of State, Austria-Hungary, Belgium, France, Germany, Turkey, Italy, Portugal, Spain, Switzerland, Sweden, Argentine Republic, Brazil, Canada and Mexico impose a duty on American breadstuffs and provisions.
 The company formed by the consolidation of the flour mills in Nashville, Tenn., has been incorporated by A. M. Shook, G. A. Dazey, J. J. McCann and others as the Union Mills. The company will issue \$500,000 of bonds for the building of new elevators and the increasing of the total daily capacity of the mills from 2,500 barrels to about 5,000.
 The Farmers' Alliance of Buchanan County, Mo., has a scheme to advance the price of wheat. A large elevator will be built, in which will be stored the wheat of the members of the Alliance until it can be sold at \$1 a bushel. To make it possible for poor farmers to store their wheat a bank will be established at St. Joseph with a capital of \$50,000, to loan money on the wheat at a low rate of interest.
 The National Pulley Covering Co. of Baltimore, Md., have recently received the following communication in regard to their well known patent friction covering for pulleys from the Embossing Co., Albany, N. Y.: "We have been using your pulley covering for about 2 years and find it almost indispensable in our factory. One of the greatest advantages is its remarkable quality of keeping the belts free from dust which formerly collected on them with uncovered iron pulleys. We have several places where the belt troubled us in slipping and have found it a perfect cure in every case. We heartily recommend it as a meritorious article."
 A Chicago report announces that the Atchison has made a new outlet to Liverpool for grain from Kansas. The route is from Kansas points over the Atchison to Galveston, and thence by boat to Liverpool. The first boat was loaded and started across the water a few days ago, and, whether fatefully or not, it was named "The Propitious." The Galveston people, it is said, have become very enthusiastic over the vast possibilities thus opened, and are now pulling every string to secure a deep-

water harbor. As it is now, only about half a cargo can be put into boats at Galveston, the rest having to be lightered. The River and Harbor bill pending before Congress contains an appropriation sufficient to make a deep-water harbor.

A recent dispatch from Harrisburg, Pa., says: Harvest time is some weeks in the future yet, and if the rye in a field on the State Lunatic Asylum farm, near this city, does not quit growing, it will have to be felled with axes by the time it is ripe. Six stalks, picked at random from the field a day or so ago, measured from 7 feet 4 inches to 8 feet 1½ inches in height. The stalks were nearly one-quarter of an inch in diameter. The superintendent of the farm says there is rye in the field taller than the tallest of the above stalks.

BOOKS AND PAMPHLETS.

The millers and flour merchants, of St. Louis, Mo., have our thanks for an invitation to participate in their 13th annual excursion, which occurs June 5. The programme represents a flour-barrel, and its contents are all 17-reduction-high-grade material. We wish the excursionists a pleasant and happy trip on the Grand Republic steamer.

The recent speech of Congressman McKinley, of Ohio, before Congress on the pending tariff bill has been issued in pamphlet form. The speech includes valuable statistical tables and is an admirable presentation of the advantages of the principles of protection, as embodied in the new Tariff Bill. Send a two-cent stamp for a copy to the American Protective Tariff League, 23 West 23d street, New York, N. Y.

The June number of *Scribner's Magazine* is an unusually full and interesting one. The frontispiece is a fine portrait of Henry M. Stanley, the great African explorer, who contributes the leading article, "The Emin Pasha Relief Expedition." This article is richly illustrated and is the first authoritative publication concerning the famous journey through the Dark Continent. The contents include also "The City House," by Russell Sturgis; "The Magic House," by Duncan Campbell Scott; "Jerry," I. VI., by an anonymous author; "Barbizon and Jean Francois Millet," by T. H. Bartlett; "In the Valley" XXXII-XXXIV., by Harold Frederic; "The Right of the Citizen," III., by Seth Low; "Amateur Track and Field Athletics," by Chas. P. Sawyer; "Rosamond," by Barrett Wendell, and "The Point of View," an interesting miscellaneous department. The number throughout is a superb one. Address Charles Scribner's Sons, 743 Broadway, New York, N. Y.

The June *Century* opens with another article by Albert Shaw, whose paper on "Glasgow" recently attracted so much attention. This time Mr. Shaw treats of "London Polytechnics and People's Palaces." John La Farge, who is writing "An Artist's Letters from Japan," this month describes the very beautiful temple of Iyemitsu, and makes some general remarks on Japanese architecture. This being the first summer number of the *Century*, W. Camp's illustrated paper on "Track Athletics in America" is particularly timely. Perhaps the most striking feature of this number is the beginning of another anonymous novel called "The Anglomaniacs." The second of Mrs. Mason's very strikingly illustrated papers on "The Women of the French Salons" treats of the literary influence of the Salons in the Seventeenth Century. A paper illustrated with four very striking wood-cut engravings by Elbridge Kingsley is devoted to the young American, Albert Pinkham Ryder, who is here called "A Modern Colorist." Joseph Jefferson's Autobiography this month deals with the "Keans in Australia," there being full-page illustrations of Mr. and Mrs. Chas. Kean. Charles de Kay has another paper in his series on Ireland, this one being entitled "Irish Kings and Brehons." An extremely timely paper is Edward Atkinson's on "Comparative Taxation." The fiction in this number, besides "The Anglomaniacs," consists of the eighth installment of Mrs. Barr's "Friend Olivia" and illustrated short stories by Arlo Bates and Octave Thanet. "What's the news?" is a fresh and interesting statement, by Eugene M. Camp, of the cost of gathering news, with other matters germane to the subject. The life of Lincoln has a sequel in this number consisting of numerous memoranda of great interest and value. Poems are here printed by Florence Earle Coates, W. C. Wilkinson, the late Mrs. Hutcheson, Andrew B. Saxton, Edward A. Oldham, Charles Henry Webb, and others.



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MILLERS' FLOUR SACKS A SPECIALTY.

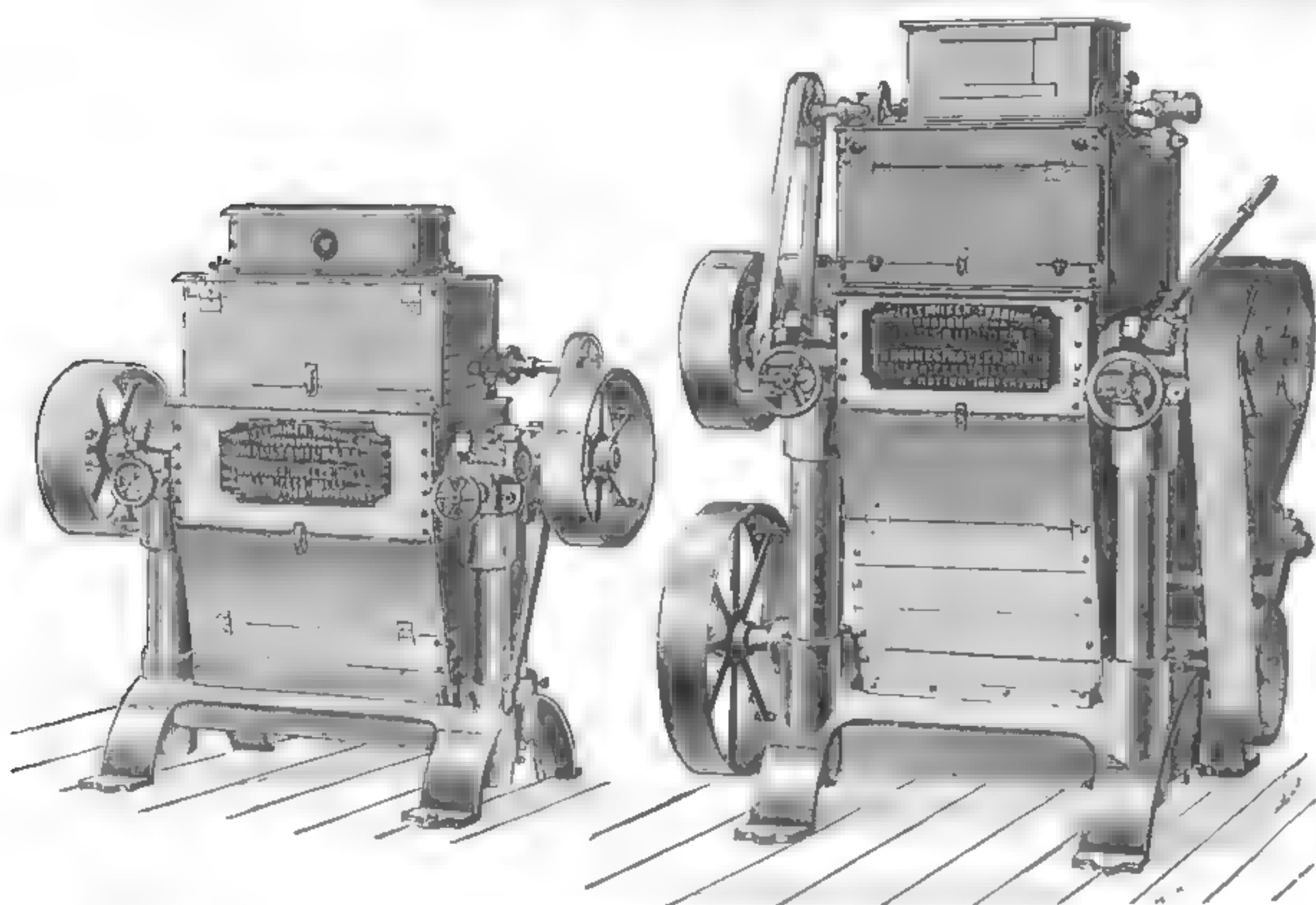
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ONE REDUCTION TO THE FRONT!

*Ye jolly millers, one and all,
Who granulate with burrs,*

A Moses has Come to Deliver You from Egypt. Cease Trying to Make Bricks without Straw. The Red Sea of Expense Has Been Divided.

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Having consummated a bargain with **MR. O. C. RITTER**, the author and patentee of **One Reduction**, which gives us the *exclusive right* to construct mills under his patents, our patrons in the future will receive a license from Mr. Ritter.

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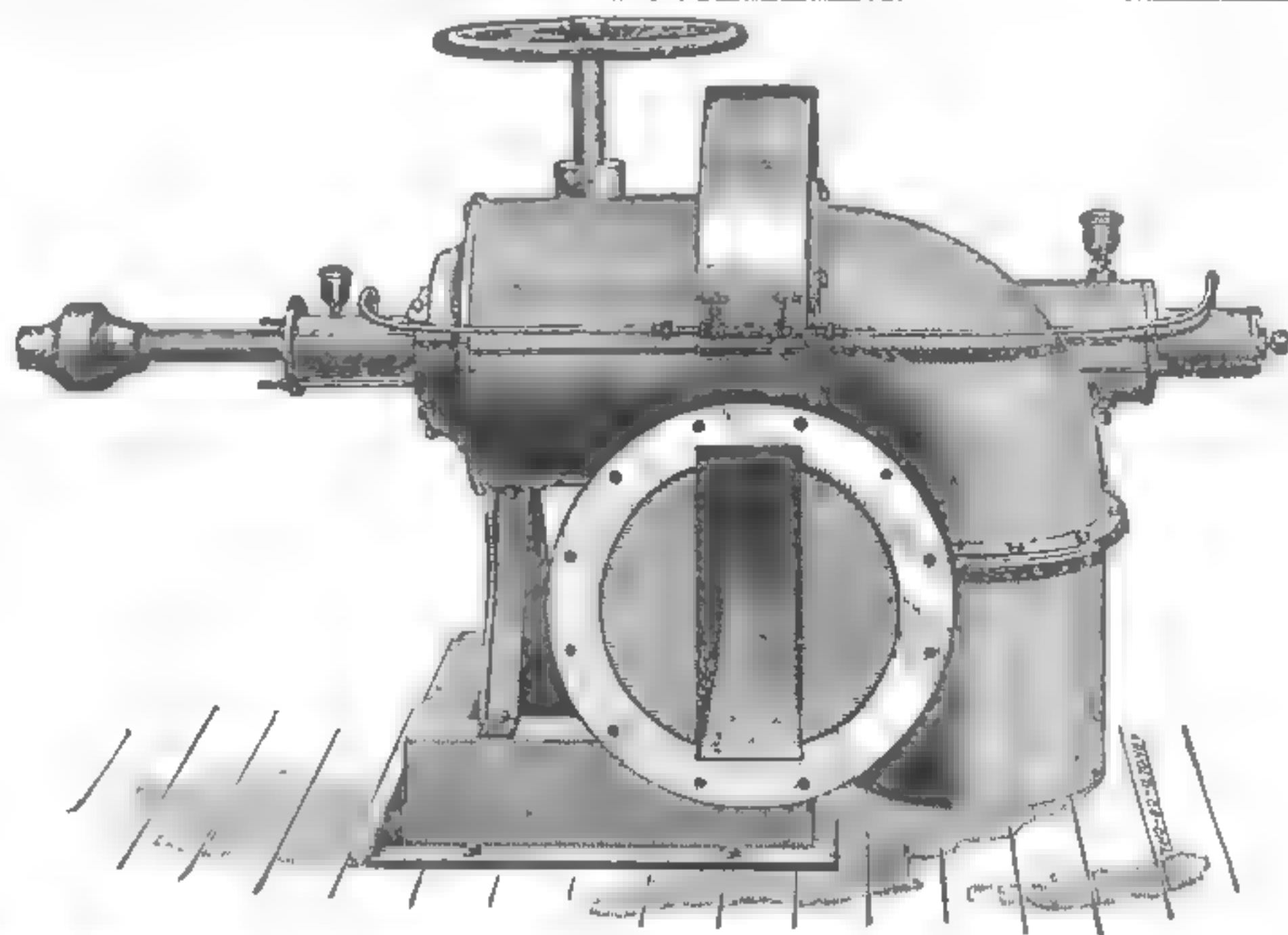
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EUROPEAN ECHOES.

THE official estimate of the yield in South Australia has been received by cable in London, and is 8 bushels per acre, against 3.85 bushels last year. The official figures for South Australia, Victoria and New South Wales are therefore now to hand, and show the yield, compared with last year, to have been as follows:

	1889-90, bushels.	1888-9, bushels.
South Australia.....	15,250,000	6,187,000
Victoria.....	11,304,510	8,647,709
New South Wales.....	6,420,000	1,450,503
New Zealand (estimated).....	8,500,000	8,770,246
Total.....	41,474,510	25,055,458

The principal feature in connection with these figures is that whereas last year New South Wales had to import about 6,000,000 bushels, this year less than 1,600,000 bushels will suffice.

THE British official report of the tests of agricultural implements and introductory effects, made during 1888-89 in India, under the auspices of the government, for the purpose of promoting the use of improved machines and methods by the natives, shows that progress and favorable results have followed. Quite a variety of modern plows have been successfully introduced, and the sales of some kinds are now considerable. Winnowing and grain-cleaning machines are very favorably received and used with satisfaction. Chaff-cutters with bullock power were operated successfully by the natives and will find customers. Grain-kibbling mills meet an increasing demand and seem to be quite extensively used. A considerable trade has been established in hoes, harrows, grubbers and water-lifts and pumps of various kinds. Of sugar-mills, cane-crushers and evaporators there is some variety; they are largely used in sections where required, and their use is said to be extending rapidly. During the past few years the government has been endeavoring to enlighten the natives and accustom them to improved methods by giving public trials and by putting implements on their farms with experts to instruct them. The results are satisfactory.

In the year 627 the springs were dried up and men fainted with the heat. In 879 it was impossible to work in the open fields. In the year 993 the nuts on the trees were "roasted" as if in a baker's oven. In 1000 the rivers in France dried up, and the stench from the dead fish and other matter brought a pestilence into the land. The heat in the year 1014 dried up the rivers and the brooks in Alsace-Lorraine. The Rhine was dried up in the year 1132. In the year 1152 the heat was so great that eggs could be cooked in the sand. In 1227 it is recorded that many men and animals came by their death through the intense heat. In the year 1303 the waters of the Rhine and the Danube were partially dried up, and people passed over on foot. The crops were burnt up in the year 1394, and in 1538 the Seine and the Loire were as dry land. In 1556 a great drouth swept through Europe. In 1614 in France, and even in Switzerland, the brooks and the ditches were dried up. Not less hot were the years 1646, 1679 and 1701. In the year 1715 from the month of March till October not a drop of rain fell; the temperature rose to 38° Reaumur, and in favored places the fruit blossomed a second time. Extraordinarily hot were the years 1724, 1746, 1756 and 1811. The summer of 1815 was so hot that the places of amusement had to be closed.

SAYS the London "Miller" of May 8: In central France the tillering of the wheat plant has begun, but, although healthy in appearance, it is rather thin in the ground. Despite the mildness of the winter, a large proportion of the grains have failed to send up shoots. In Normandy the wheat is hardy and thriving, but in Brittany and La Vendee the want of warmth has been an untoward feature of the season, and the wheat plant is considered too grassy in look and hue. In Spain the arid weather which prevailed from the 1st to the 19th of April was happily broken by five days rain. Since the 24th things have been looking up, and a

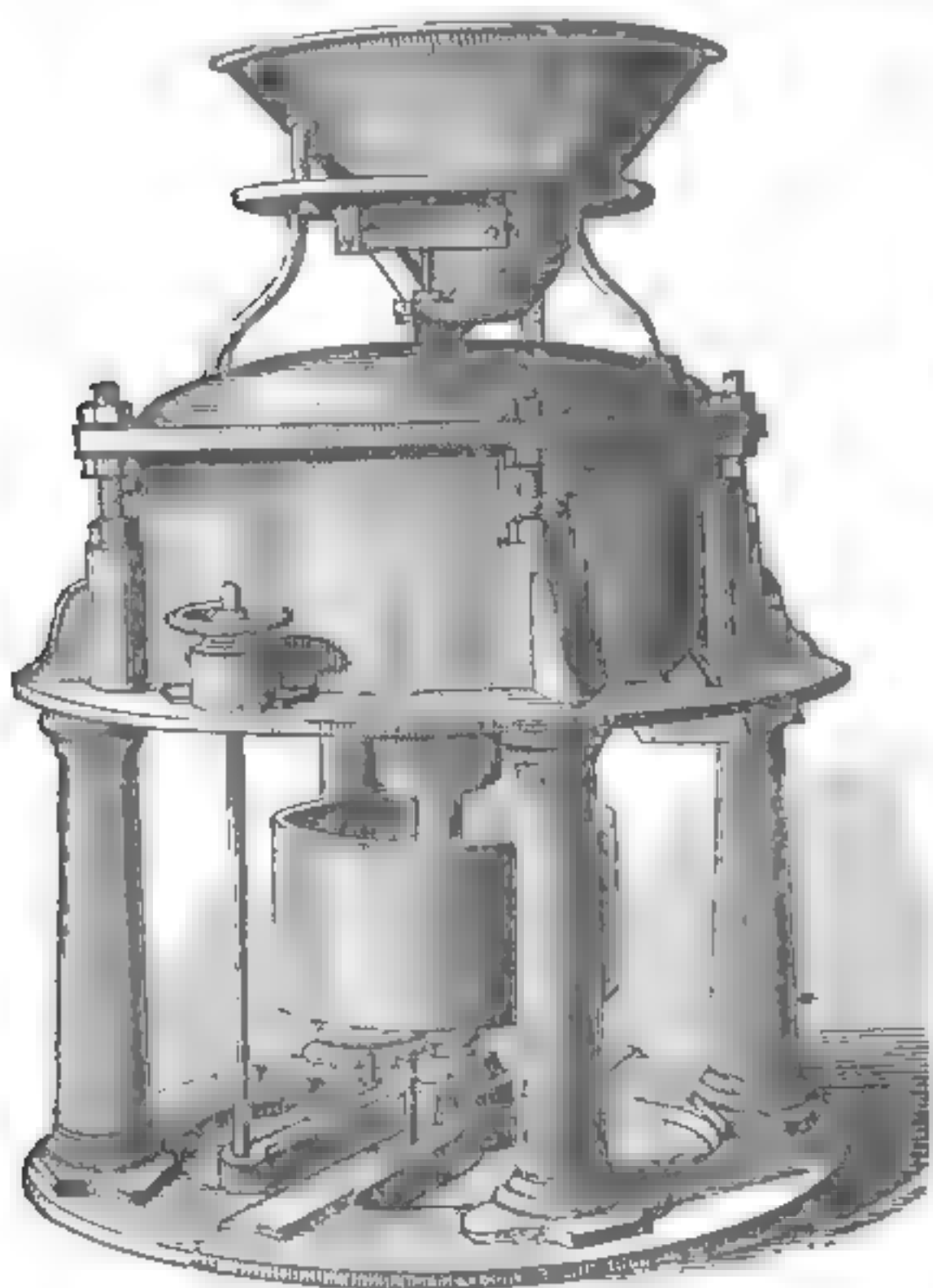
good yield of wheat is now regarded as within the power of a warm and genial May and June to bestow. The plant is there and requires but to ripen. In Italy the outlook is satisfactory, and the farmers are hopeful that the poor crops in 1888 and 1889 will be replaced by a full average yield this year. In Algeria the wheat crop is expected to be a large one, there being a full mean promise on an acreage 20 to 30 per cent. larger than last year. Wheat is not grown in Algeria to an extent making the European markets watchful of the crop outturn. In Prussia the wheat along the Baltic coast is backward, but strongly rooted and very healthy-looking. Cold rain in Poland and central Russia has not been favorable to the growing wheat, but in southern Russia the Azima grain has come on well, and Ghirka has been sown under circumstances giving farmers cause for good hope. In Austria-Hungary the winter broke up rather suddenly about the 24th, and since then everything has hastened to put on the green livery of spring. The wheat is now spoken of most favorably, and the disastrous crop deficiency of 1889 is, so anticipation has it, to be made a "bumper" yield in 1890. Roumania and south-eastern Europe share in the good promise of the great Russian and Austria empires, to which they are adjacent. The yield of wheat in India is not yet the subject of any advices which can be called precise, but enough is already known to make it clear that the exports of 1890 will not be equal to those of an average year, probably not even equal to those of 1889-90, which were themselves about 1,000,000 quarters under mean expectation of output. The yield in the Central Provinces and in the South represents about 12 annas, which is about equivalent to eight bushels per acre, though the Indian reckoning in the value of the produce—the anna is a corn value three half-pence—makes the reports from the growers vary with the current quotations at their local markets. This is nearly an average yield for these regions, which ordinarily produce about nine bushels to the acre. But in the North-Western Provinces and in the Punjab, which are the great wheat-growing districts of India, the deficiency is not less than 25 per cent. The news which reaches us from the England of the South Pacific, New Zealand, is a pleasant foil to the gloom of Indian advices. Mr. Stead, of Christchurch, writes that the New Zealand farmers have been very fortunate in the weather experienced ever since the New Year, and have been thereby enabled to secure their crops in almost perfect condition. The yield of wheat varies a good deal, according to district, and the quality is likewise unequal, so that it is very difficult even to guess at what will be the actual surplus of good milling wheat. The lighter lands have yielded least, owing to the prevailing dryness of the season, and there is a larger share than usual of shriveled wheat, especially in the northern and hotter counties. As usual in a hot, dry season, there is, after all deductions, a good bulk of very fine grain, rich in milling qualities, full of sweetness, strength and nutriment. It is thought by another New Zealand correspondent that the two islands will have at least 250,000 quarters of wheat to ship, of a quality fully equal to fine South Australian, and that this wheat, put on the market at a price equaling 34s. at Mark Lane, will have a ready sale.

A NEW METHOD OF TREATING DISEASE.

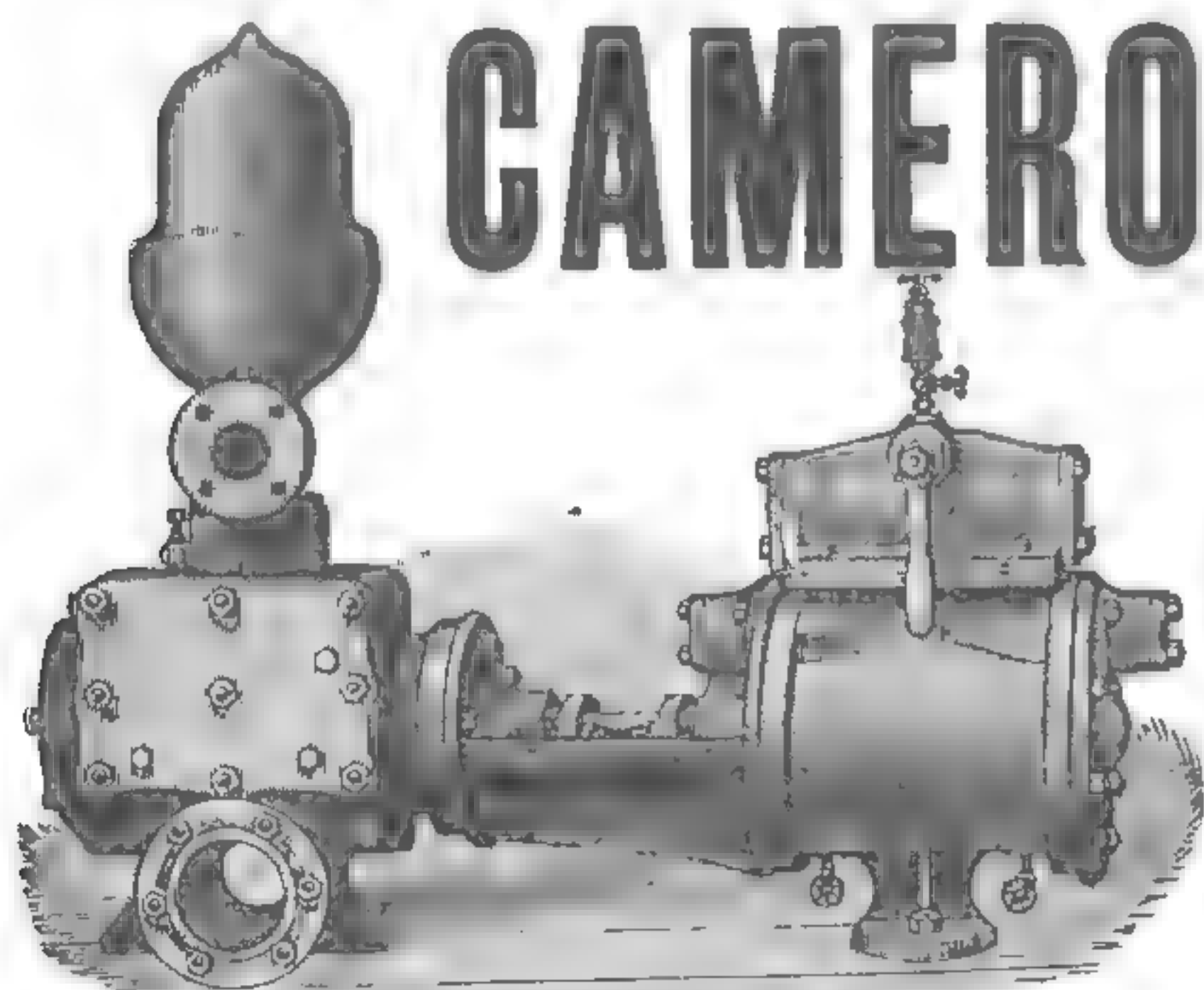
HOSPITAL REMEDIES.

What are they? There is a new departure in the treatment of disease. It consists in the collection of the specifics used by noted specialists of Europe and America, and bringing them within the reach of all. For instance the treatment pursued by special physicians who treat indigestion, stomach and liver troubles only, was obtained and prepared. The treatment of other physicians, celebrated for curing catarrh was procured, and so on till these incomparable cures now include disease of the lungs, kidneys, female weakness, rheumatism and nervous debility.

This new method of "one remedy for one disease" must appeal to the common sense of all sufferers, many of whom have experienced the ill effects, and thoroughly realize the absurdity of the claims of Patent Medicines which are guaranteed to cure every ill out of a single bottle, and the use of which, as statistics prove, has ruined more stomachs than alcohol. A circular describing these new remedies is sent free on receipt of stamp to pay postage by Hospital Remedy Company, Toronto, Canada, sole proprietors.



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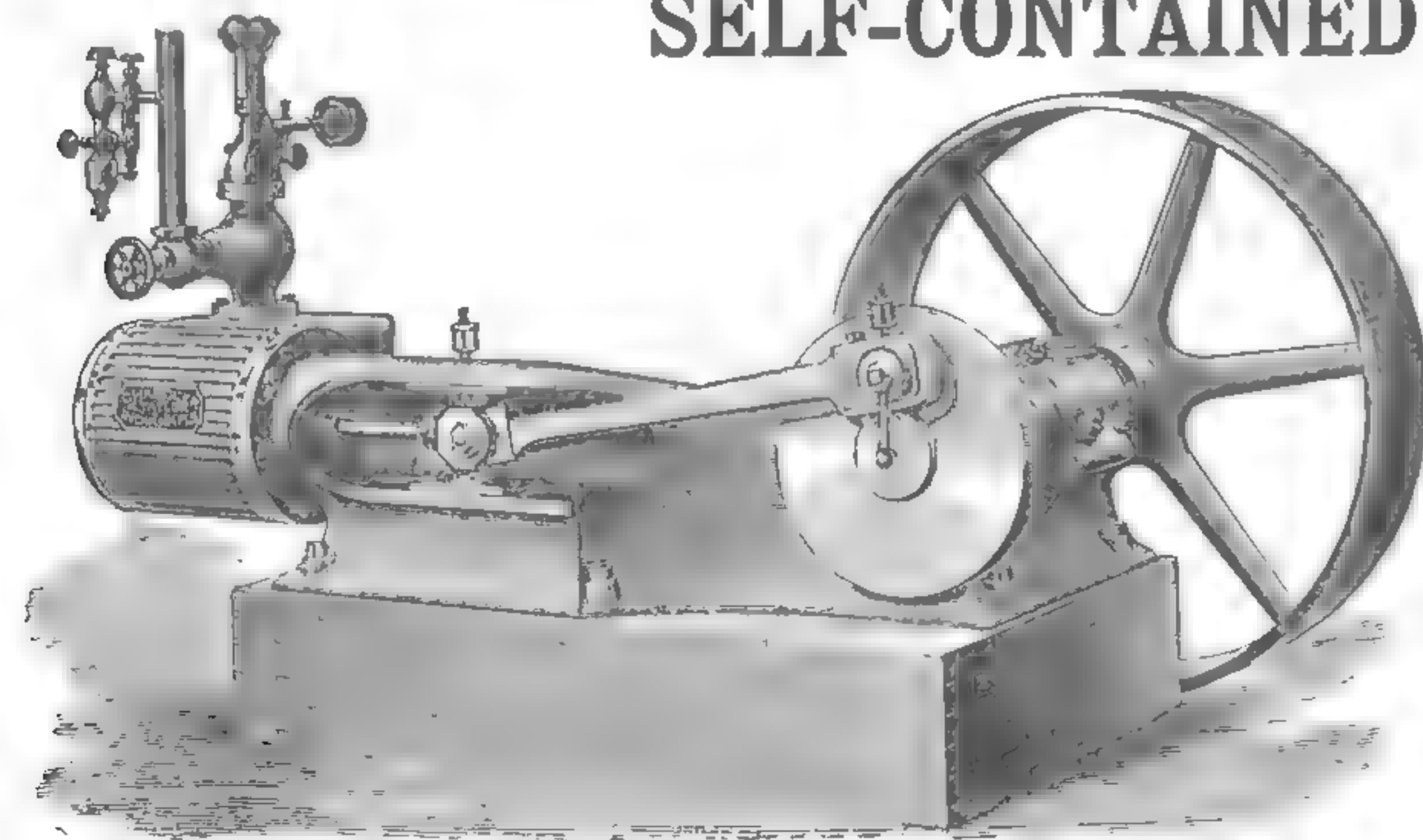
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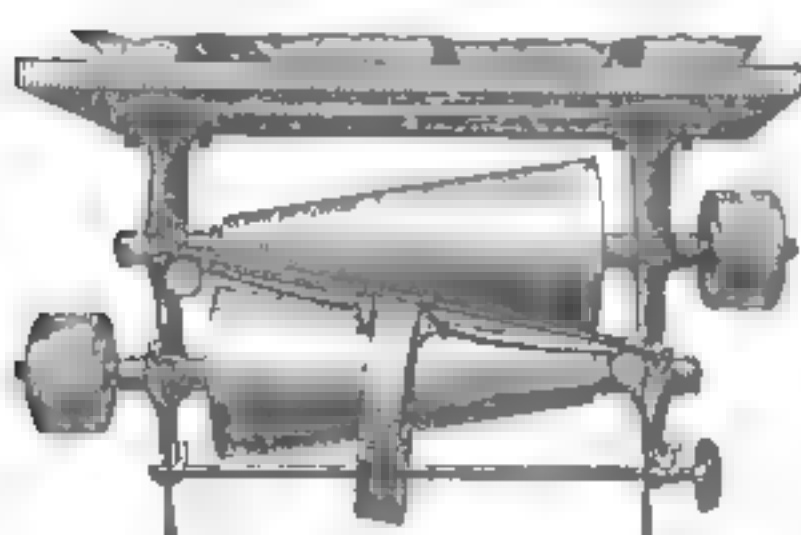
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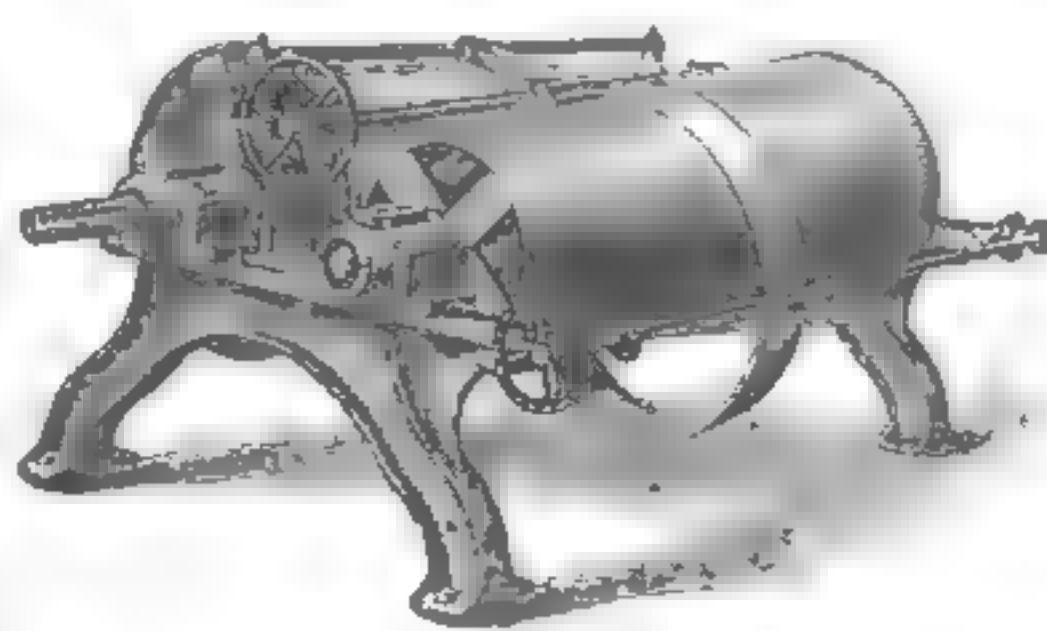
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Machinery a Specialty.

THE EVANS FRICTION CONE & FRICTIONAL GEARING

"PATENTED."



This cut represents a set of hanging cone pulleys. This pattern is intended for that class of machinery that stops and starts at the same speed, and at the same time be able to change the speed more or less while running. These cones are also fitted with a governor where a steady motion is required and the initial power is



fluctuating. All sizes made from 1/2 Horse Power to 60 Horse Power. **SEND FOR ILLUSTRATED CATALOGUE.**

EVANS FRICTION CONE CO., 85 Water St., BOSTON.





OFFICE OF THE MILLING WORLD,
BUFFALO, N. Y., May 31, 1890.

Friday of last week was a day of unsettled and irregular wheat markets, on manipulation, with the near months closing lower and the late months higher. In New York May wheat closed at 99c., June at 98½c., and July at 98½c. The Atlantic port receipts were 174,046, exports 18,028, and options 13,750,000 bushels. Europe reported generally fine weather, and Great Britain particularly favorable conditions for wheat and other growing crops. Rains were reported in Dakota, chess and saw-fly in winter-wheat States, and generally mixed weather conditions all around. May corn closed at 40½c., with receipts 284,878, exports 272,836, and options 320,000 bushels. May oats closed at 34½c., with receipts 816,618, exports 146,093, and options 650,000 bushels. Wheat flour was dull and irregular, but held firmly on all winters at the 10c. advance of Thursday by western millers on all grades above common superfine. Trading was small. Receipts included 8,458 sacks and 28,943 barrels, and exports 21,609 sacks and 3,843 barrels. The minor lines were featureless. Among the wheat crop reports was one from St. Louis, Mo., saying that McPherson county, Kansas, the banner wheat district of that State, will not raise 30 per cent. of a crop. There have been a great many dispatches of the same tenor from the Southwest.

Saturday brought dull and lower markets on better weather reports from the wheat States, and on realizing. Minnesota, the Dakotas, Kansas and Missouri reported rains. May wheat closed at 97½c., with receipts 120,645, exports 46,186, and options 2,500,000 bushels. May corn closed at 40½c., with receipts 268,790, exports 154,806, and options 250,000 bushels. May oats closed at 34c., with receipts 230,713, and exports 52,589 bushels. Wheat flour was barely steady on winter trade brands and very dull. The 10c. advance was all lost, and the whole list was easy. Receipts were 4,518 sacks and 23,979 barrels, and exports 20,937 sacks and 5,053 barrels. The minor lines were unchanged and featureless.

Monday brought active and generally lower markets, on better weather and better crop reports, on some short selling and free realizing, and on manipulation by Cudaby and Hutchinson, of Chicago. May wheat closed at 97½c., with receipts 366,670, exports 39,871, and options 6,864,000 bushels. Some winter wheat sections sent in very bad reports of conditions, and bad rust was reported in Tennessee, but the bears were the only ones who had not dropped their guns, and the bad reports were whooped down. May corn closed at 40½c., with receipts 612,693, exports 279,625, and options 1,200,000 bushels. May oats closed at 34c., with receipts 353,627, exports 118,779, and options 1,770,000 bushels. Wheat flour was dull and depressed with wheat. Receipts were 6,854 sacks and 34,889 barrels, and exports 5,606 sacks and 12,735 barrels. Millers in New York, Milwaukee and elsewhere proposed to shut down during the week. The minor lines were all dull and featureless. The visible supply in the United States and Canada was as follows:

	1890. May 24.	1889. May 25.	1888. May 26.
Wheat.....	22,458,003	21,284,385	27,662,485
Corn.....	11,078,702	11,054,936	8,268,360
Oats.....	4,384,318	6,341,751	5,002,811
Rye.....	763,204	1,247,692	206,123
Barley.....	620,395	613,557	378,495

Thursday brought irregular, active and lower markets on manipulation. Crop reports were very confusing, and bulls realized freely, and exporters bought more liberally and steadied up prices somewhat. Despite the bad crop conditions reported from nearly every important winter-wheat section, the bulls seemed to be

afraid to attempt to boost prices. Rust, saw-flies and Hessian flies were reported to be abundant and very active in many sections. May wheat closed at 95½c., with receipts 170,704, exports 72,921, and options 5,650,000 bushels. The amount of wheat on passage increased 1,472,000 bushels, of which 800,000 bushels were from India. May corn closed at 39½c., with receipts 273,313, exports 169,831, and options 960,000 bushels. May oats closed at 33½c., with receipts 428,562, exports 77,941, and options 440,000 bushels. Wheat flour was off and slow. Receipts included 11,522 sacks and 81,711 barrels, and exports 19,434 sacks and 39,692 barrels. The minor lines were featureless.

Wednesday brought stronger and irregular markets, except on wheat, which ruled unchanged on continued selling by Hutchinson. May wheat closed at 95½c., after selling up to 96½c., with receipts 137,938, exports 20,610, and options 2,176,000 bushels. Cables were tame and foreign markets were apparently in a waiting mood. The Kansas State Board of Agriculture made the wheat condition 72 in that State, and all the winter-wheat reports were on the bull side. The offset influence came from Europe, where the reports tell of great things in the crop outlook, and from Hutchinson's unexplained selling in Chicago. It was rumored that Hutchinson, really believing in a "bull" future, is trying to "shake out" certain heavy holders of wheat before he begins a regular bull campaign, preferring to have as little company as possible. Chicago reports indicated a decline in condition of wheat in Illinois on account of cheat, chess and Hessian fly. Indiana shows some improvement. Ohio is unchanged. Missouri is considerably improved. Kentucky shows a decline of several points. Kansas is injured by drouth and hail. In the last State they figured 10 per cent. reduction, but add that abundant rains have fallen the past week, and a marked improvement is looked for. In the Northwest the report on the wheat is favorable. They summarize the reports: Illinois 67, Indiana 66, Ohio 85, Kentucky 81, Missouri 81, Kansas 82, Wisconsin 77, Michigan 81, Iowa 93, Nebraska 89, Minnesota 86 and South Dakota 92. Some reports from Kentucky say that the crop there is all right, and will exceed that of last year. In Missouri the railroad reports and those of private parties differ widely; the railroad reports indicating a fair crop. Kansas reports were badly mixed, very good and very poor. South Kansas reported wheat cut last Friday near Arkansas City, which shows good growth, with large well-filled heads. Reports in Missouri and Kansas estimate the crop, if well treated from this on, about two-thirds average.

May corn closed at 40½c., with receipts 462,117, exports 71,447, and options 680,000 bushels. May oats closed at 33½c., with receipts 372,635, exports 11,927, and options 110,000 bushels. Rye grain was dull at 58@58c. for western afloat, 57½@58c. for Canada, and 57½@58c. for State on track. Barley was featureless and unquoted. Malt was nominally unchanged. Mill-feed was slow at 80@85c. for 40, 60, 80 and 100 lbs. and rye.

Wheat flour was in slightly better demand for low-grades for the provinces, and the other lines were unchanged and dull. Receipts included 2,449 sacks and 20,094 barrels, and exports 7,088 sacks and 2,608 barrels. Rye flour was easier at \$3.10@3.15. Corn products were slow and steady at the following quotations: Coarse bag meal 79@81c; fine yellow 92@95; fine white \$1; Southern 85@1.40 for common to fancy; Southern and Western in barrels \$2.35@2.45; yellow granulated \$2.60@2.65; white do \$2.70@2.75; flour \$3@3.25; Brandywine \$2.55.

The following shows the amount of wheat and flour, together with the amount of corn on passage to United Kingdom, for ports of call or direct ports for the weeks mentioned:

	1890. May 27.	1889. May 28.
Wheat and flour, qrs....	2,954,000	1,572,000
Corn, qrs.....	757,000	335,000

The following shows the amount of wheat and corn on passage to the Continent for the past week and for the same week last year:

	1890. May 27.	1889. May 28.
Wheat, qrs.....	963,000	367,000
Corn, qrs.....	360,000	148,000
Shipments India wheat to U. K.	72,500	
do do Continent..	27,500	

The imports into the United Kingdom for the past week, the previous week and for the same week in previous year were as follows:

	1890. May 27.	1890. April 20.	1889. May 28.
Wheat, qrs.....	249,000	270,000	196,000
Corn, qrs.....	192,000	336,000	214,000
Four, bbls.....	122,000	230,000	184,000

Thursday brought little change in the markets. Wheat was moderately active and lower, May closing at 94½c., and June at the same figure. Receipts were 94,000, exports 122,000, and options 3,672,000 bushels. Corn was quiet, May closing at 40c. and June at 40½c., with receipts 100,000, exports 61,000, and options 560,000 bushels. Oats were firm and quiet, May closing at 34c. and June at 33c., with receipts 64,000, spot sales 129,000, and options 300,000 bushels. Wheat flour was dull and heavy. Receipts were 32,000 and sales 17,800 packages. The Minneapolis output last week was only 107,340 barrels, and prices asked were 5@10c. lower in the week preceding. Sales were made at the following prices: Low extras \$2 50@3.; city mills \$4 35@4.55; city mills patent \$5@5.50; winter wheat low grades \$2 50@3.; fair to fancy \$3.15@4.90; patents \$4.50@5.50; Minnesota clear \$3 60@4.50; straights \$3.90@5; patents \$4.50@5.65; rye mixtures \$3 60@4.30; superfine \$2@2.85. The minor lines were featureless.

BUFFALO MARKETS.

WHEAT—The markets opened weak and fell off a couple of cents during the day. A car of No. 1 hard sold at 99½c early, but later on 9,000 bushels were sold at 97½c. No. 1 Northern sold early at 97½c for 8,300 bushels, then 4,000 bushels went at 97c, and 1,000 bushels at 96c. Winter wheat was quiet. Some No. 1 hard, c.i.f., was sold at 96½c, offered at 97c, and on track at 97½@98c. No. 1 white on track was held at 98c. CORN—The corn market eased off somewhat during the day. Five cars of No. 3 yellow sold at 87½c, but at the close 37c was the figure, and 37½c for No. 2 yellow. No. 2 corn closed at 36½@37c, and No. 3 do at 36½@38½c. OATS—The market was quiet. No. 2 white sold early at 83½c, but at the close was quoted at 82½c in store, and 83c on track. One car of No. 2 mixed was sold at 82c. RYE—Prices in this market are nominal at 58c for No. 2 in store. BARLEY—Little is done in this market. Quotations are nominal at 63@65c, for No. 2 Canada and 58@60c for No. 3 do. OATMEAL—Akron, \$5.45; Western, \$5.25 per bbl.; rolled oats, in cases, 72 lbs., \$3.25. CORNMEAL—Coarse, 75@85c.; fine, 80@90c.; granulated, \$1.50 per cwt. MILLFEED—City-ground coarse winter, \$14.50@15.00 per ton; fine do. \$14.50@15.50; finished winter middlings, \$15.00@16.00; coarse spring do, \$14.00@14.50.

FLOUR MARKET.

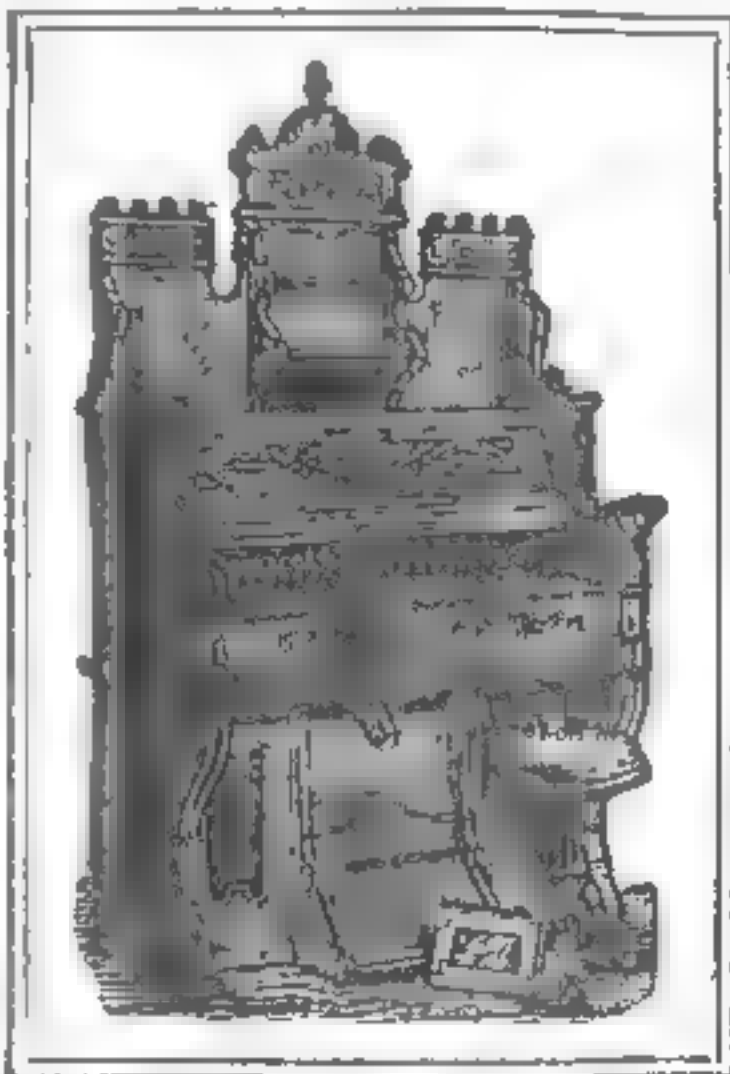
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Straight..... 5.25@5.75	Straight... 5.25@5.75
Bakers..... 4.75@5.25	Clear..... 5.00@5.50
Red Dog... 2.50@3.25	Low grades. 3.00@4.25
Rye flour 3.75@—	Graham.... 4.50@—

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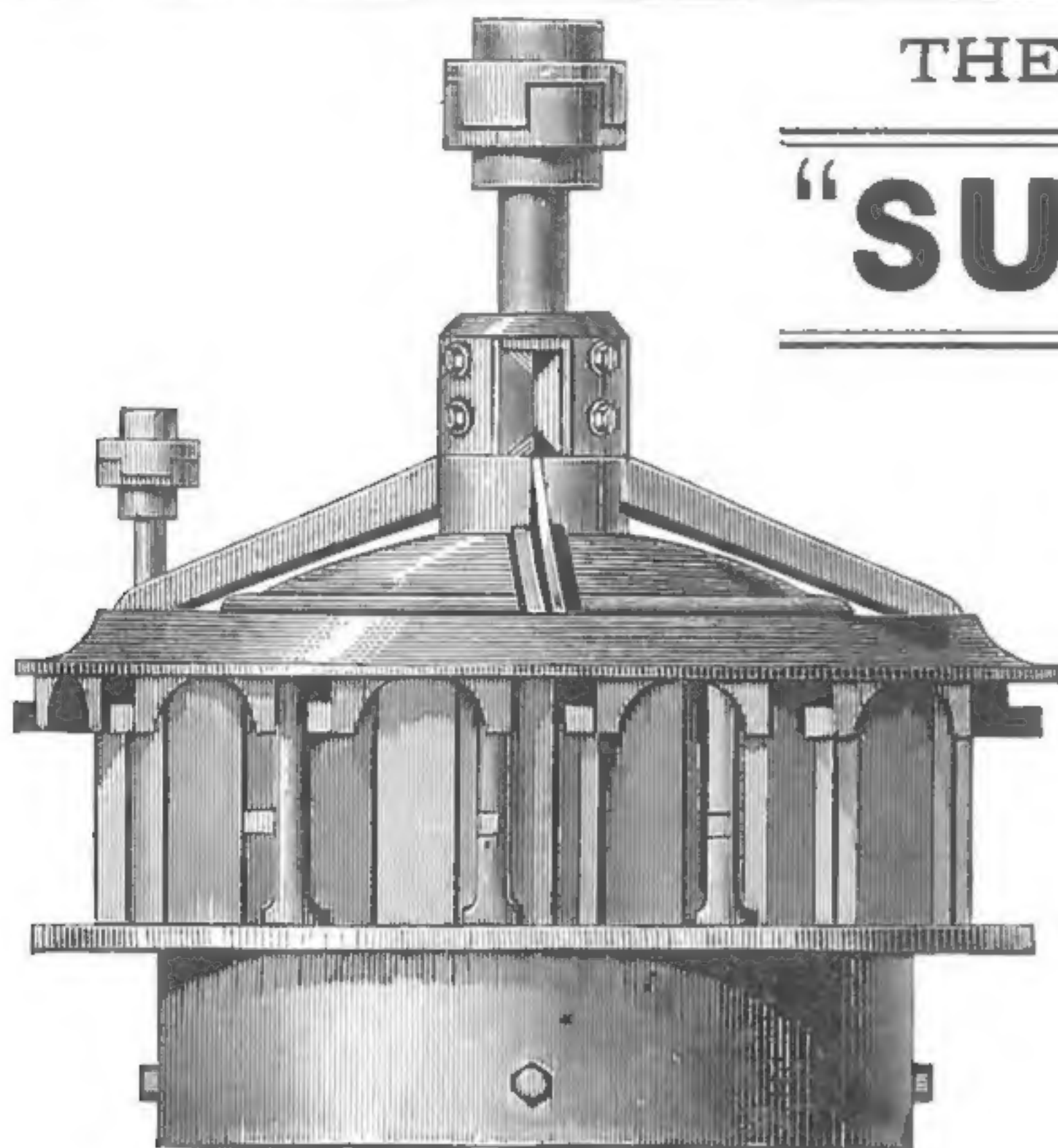
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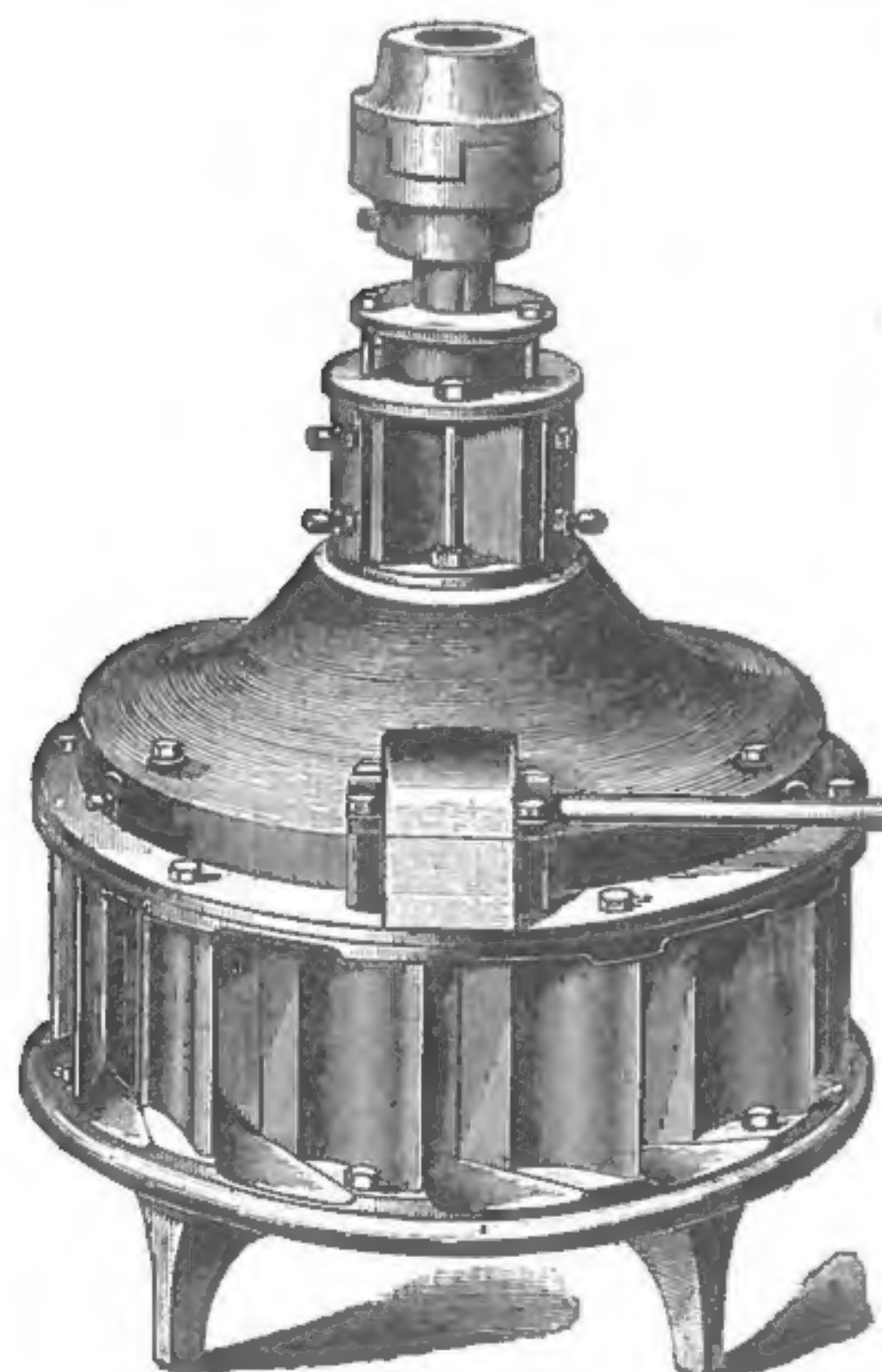
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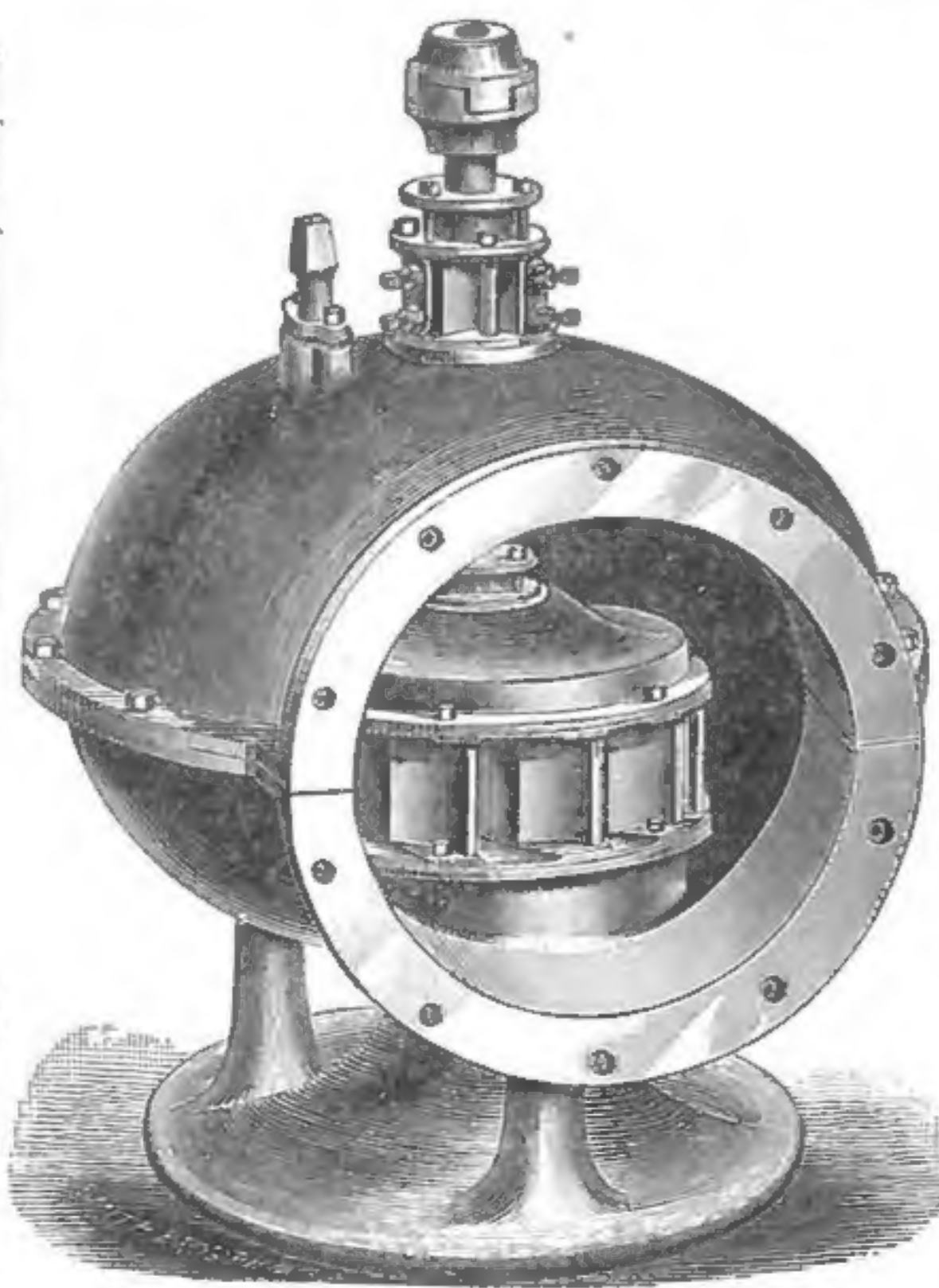
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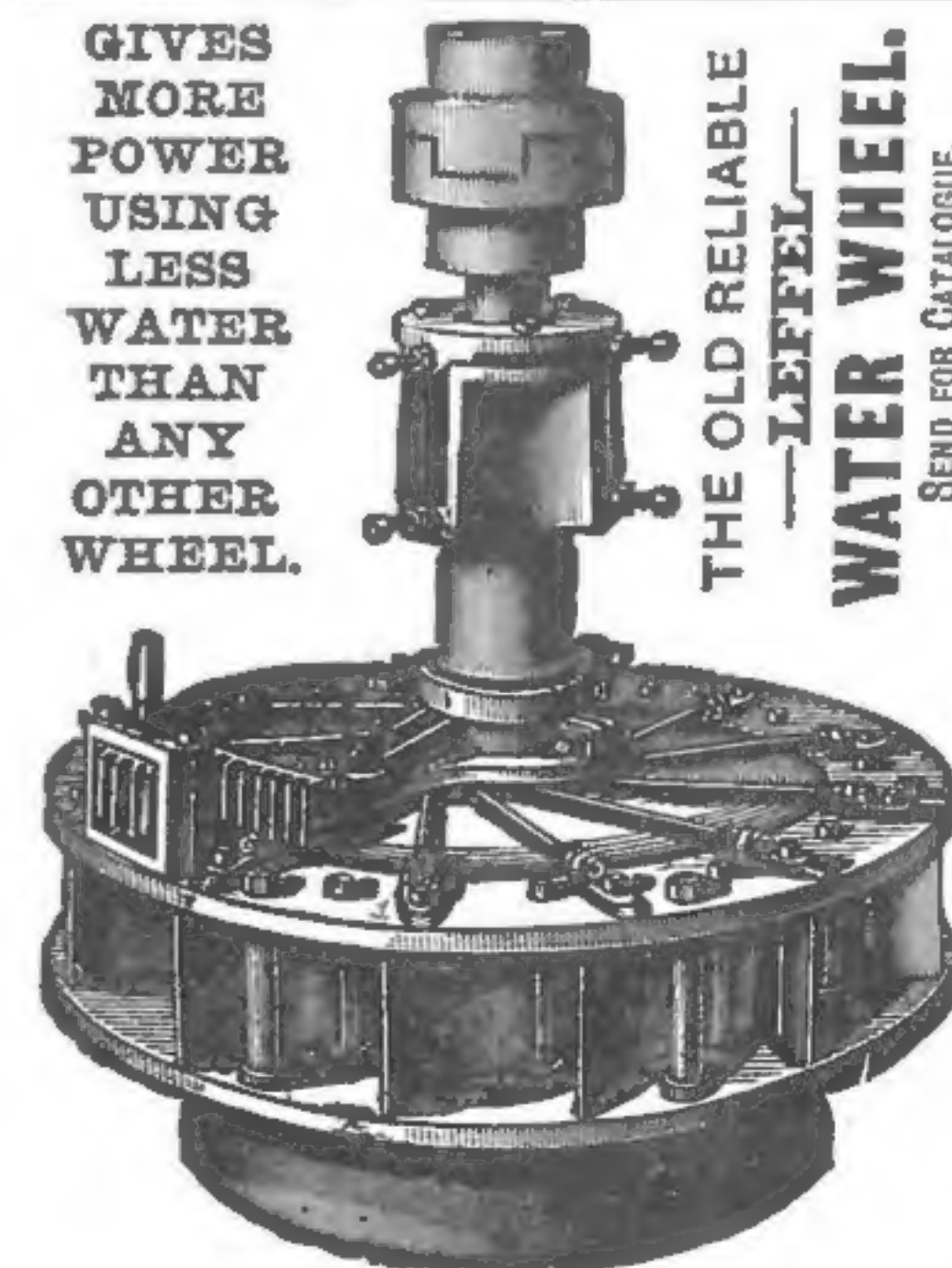
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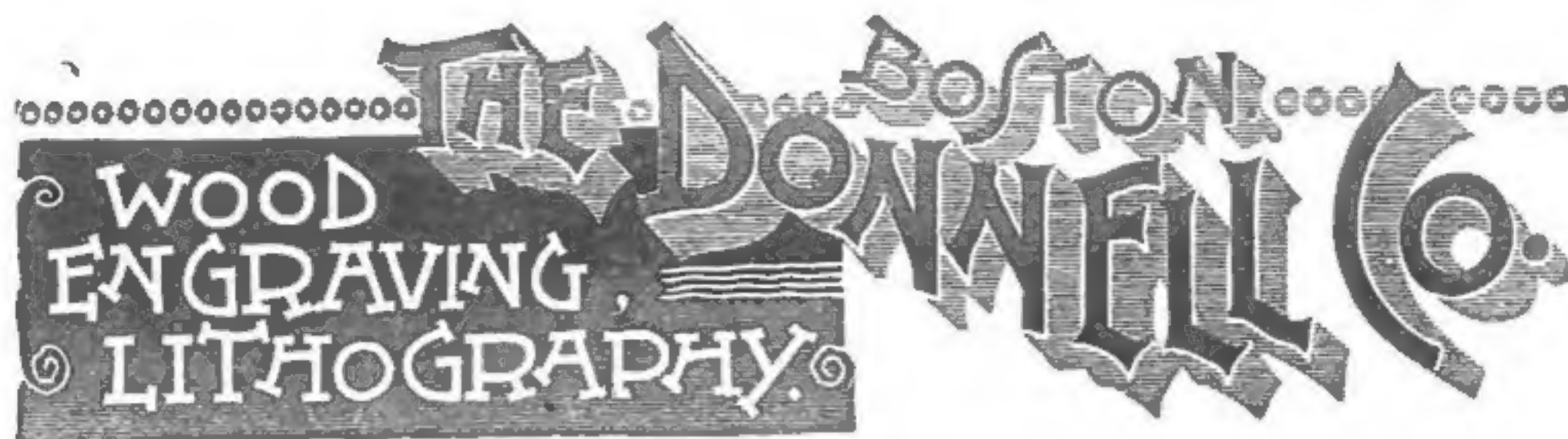
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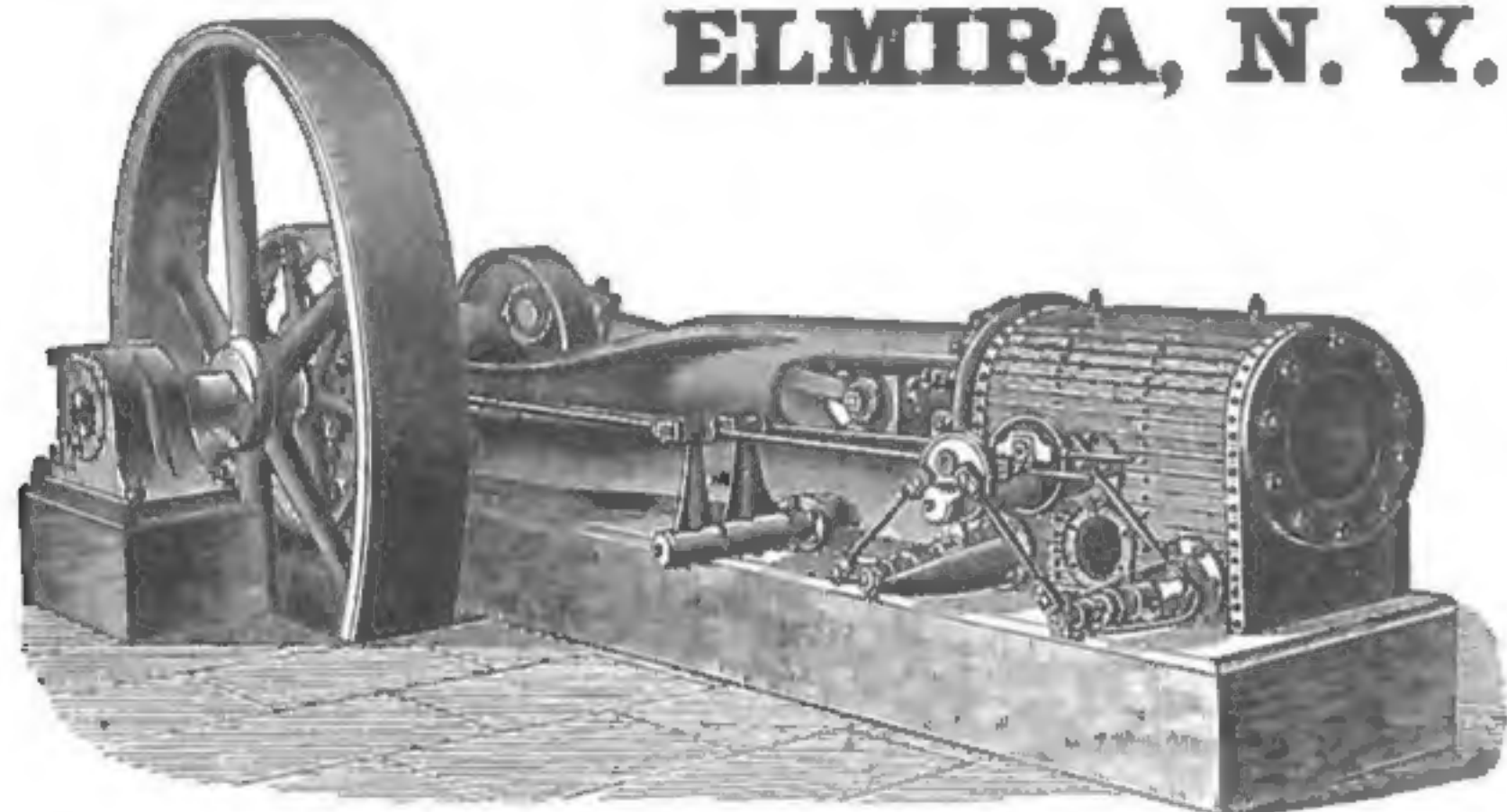


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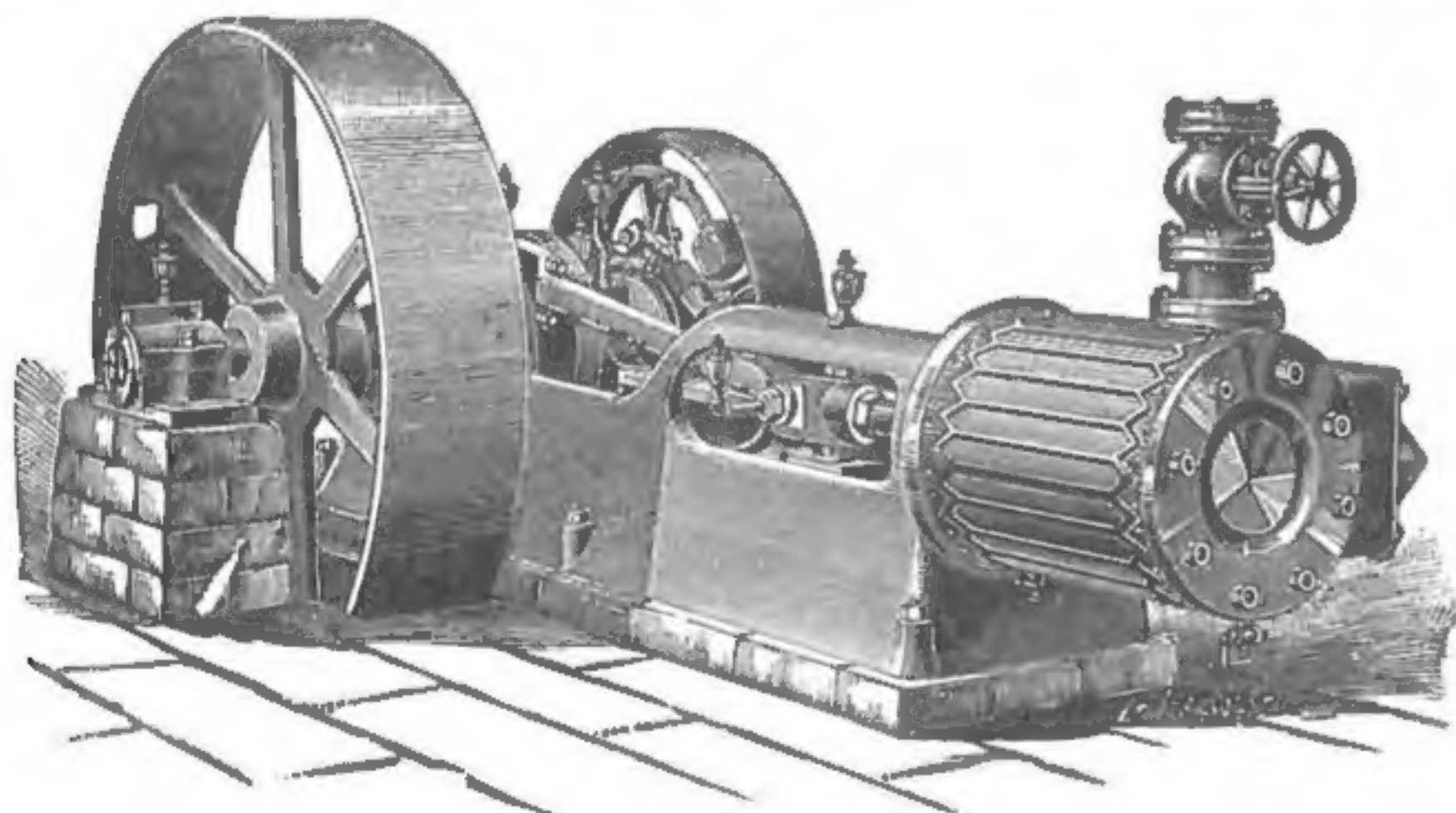
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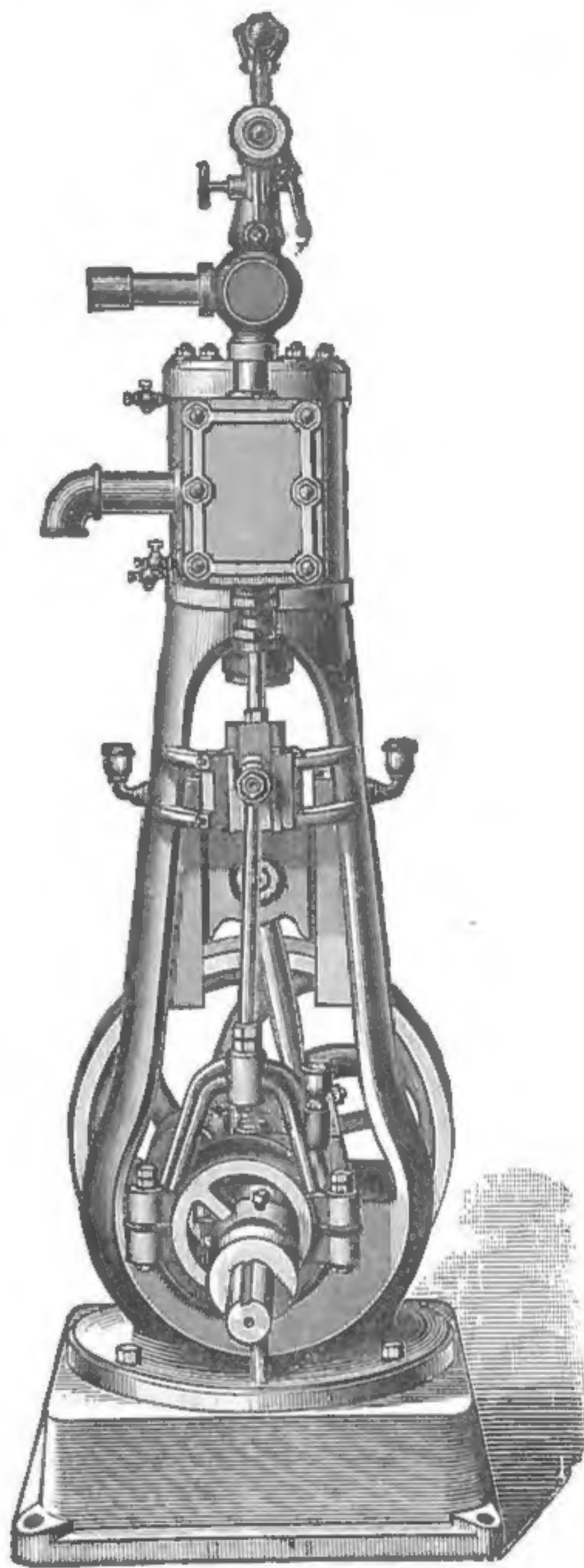
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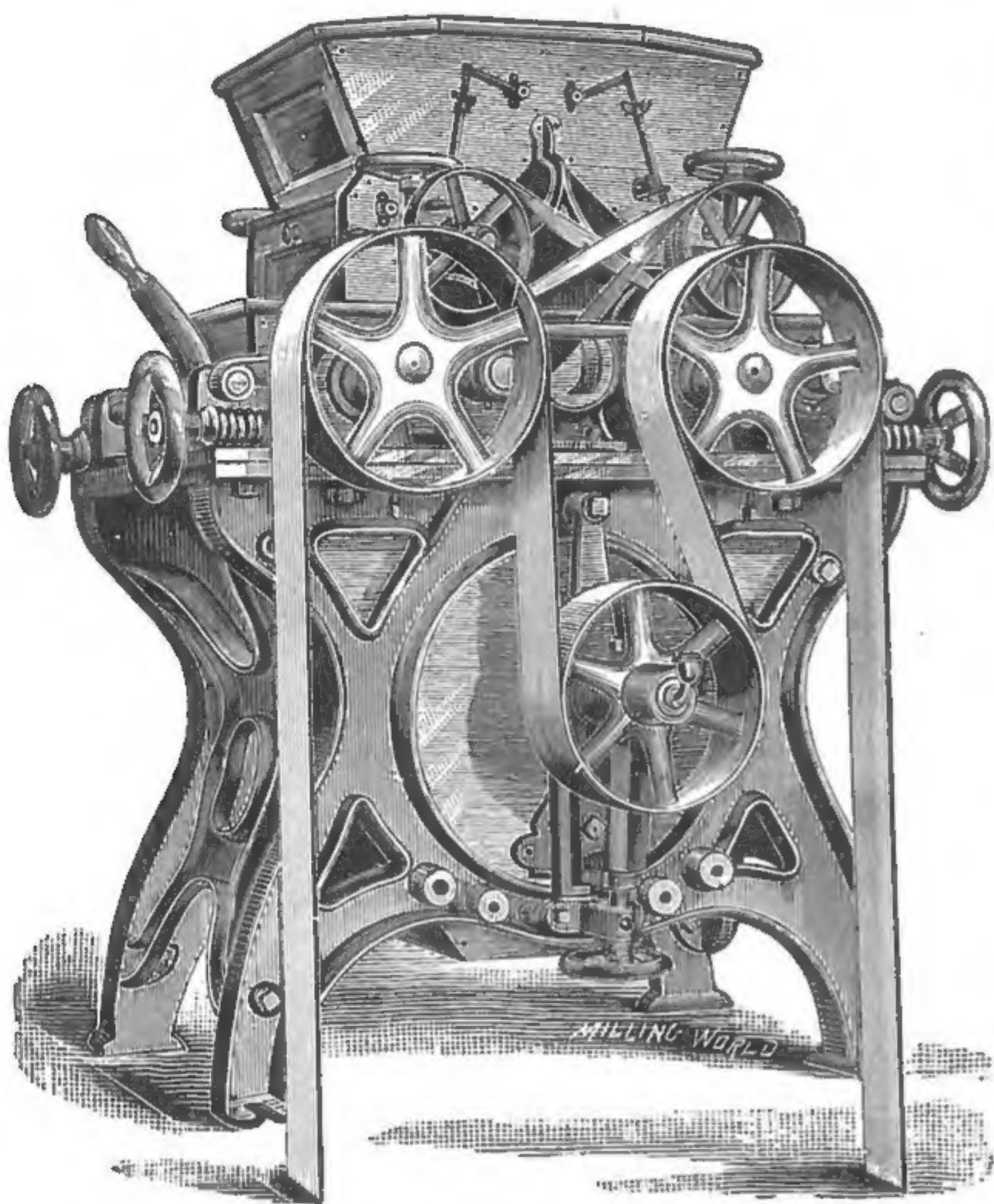


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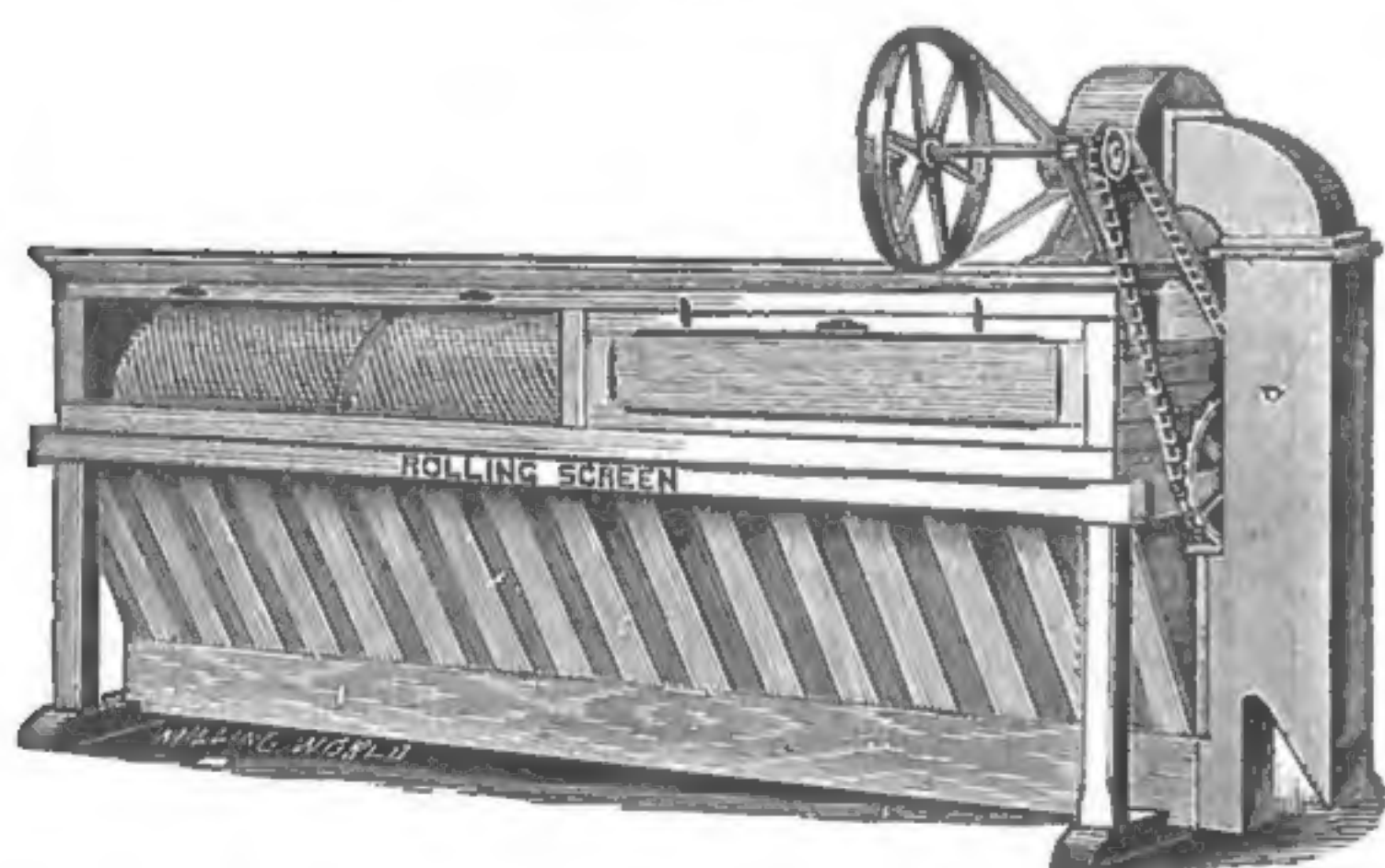
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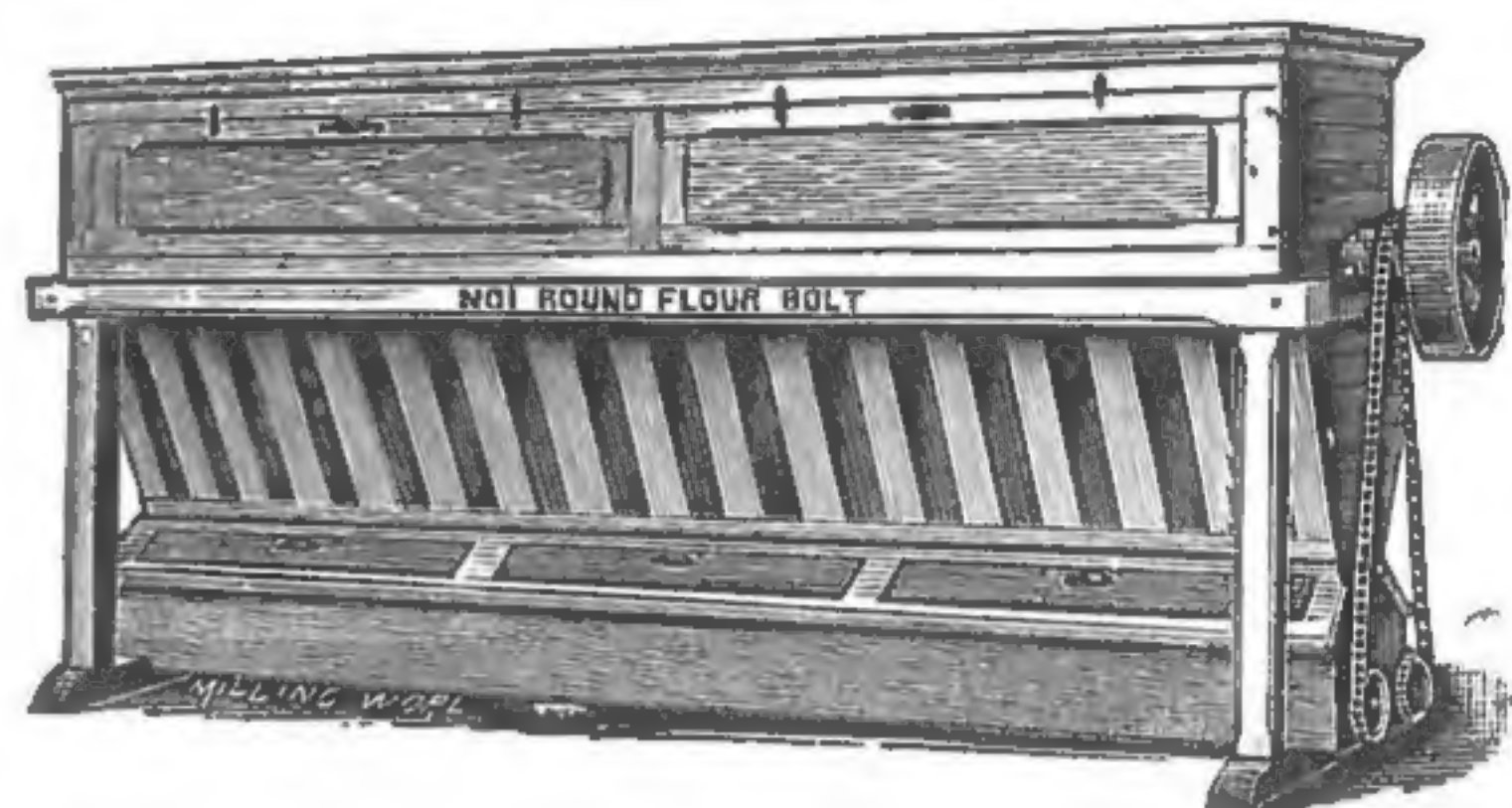
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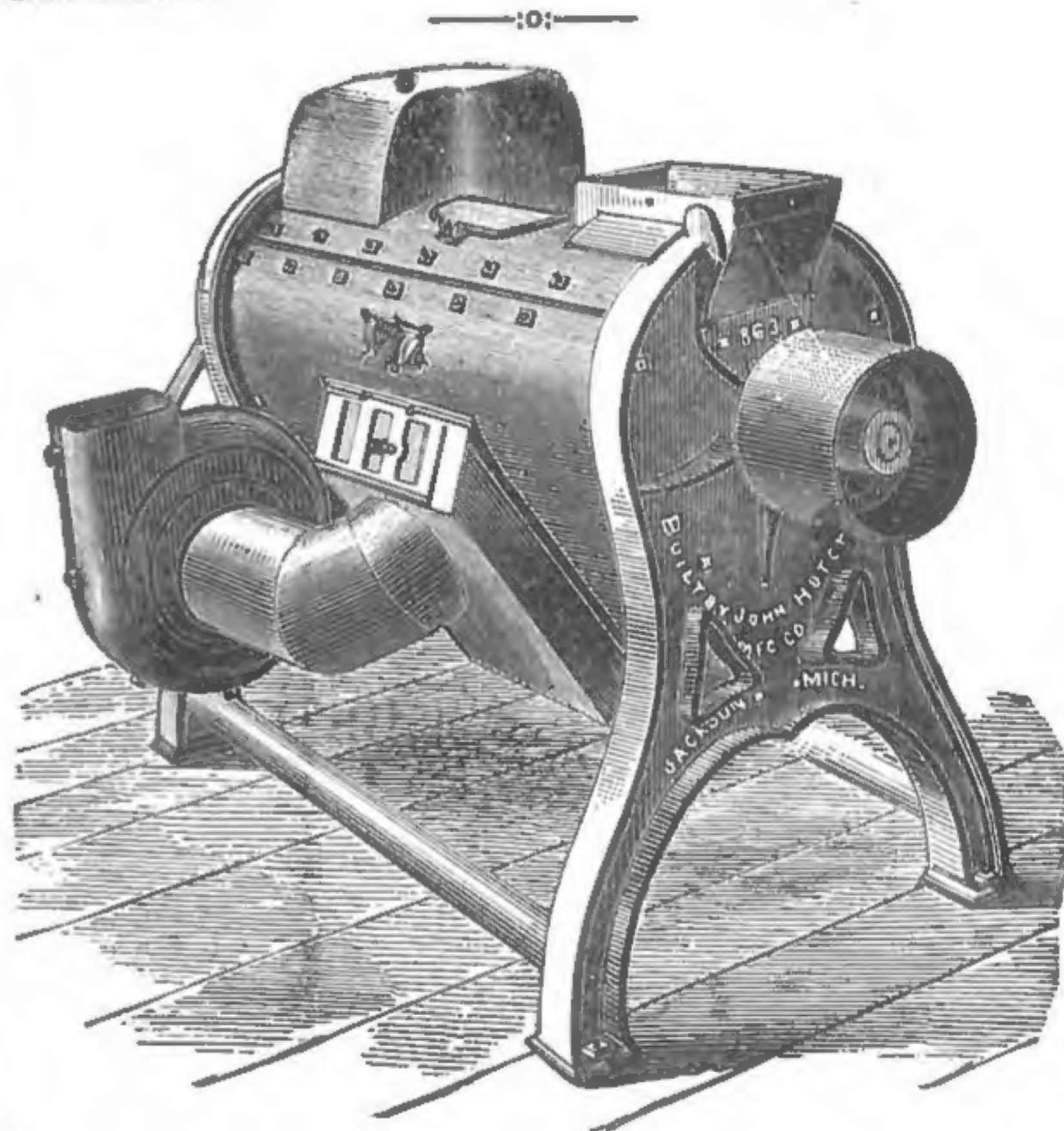


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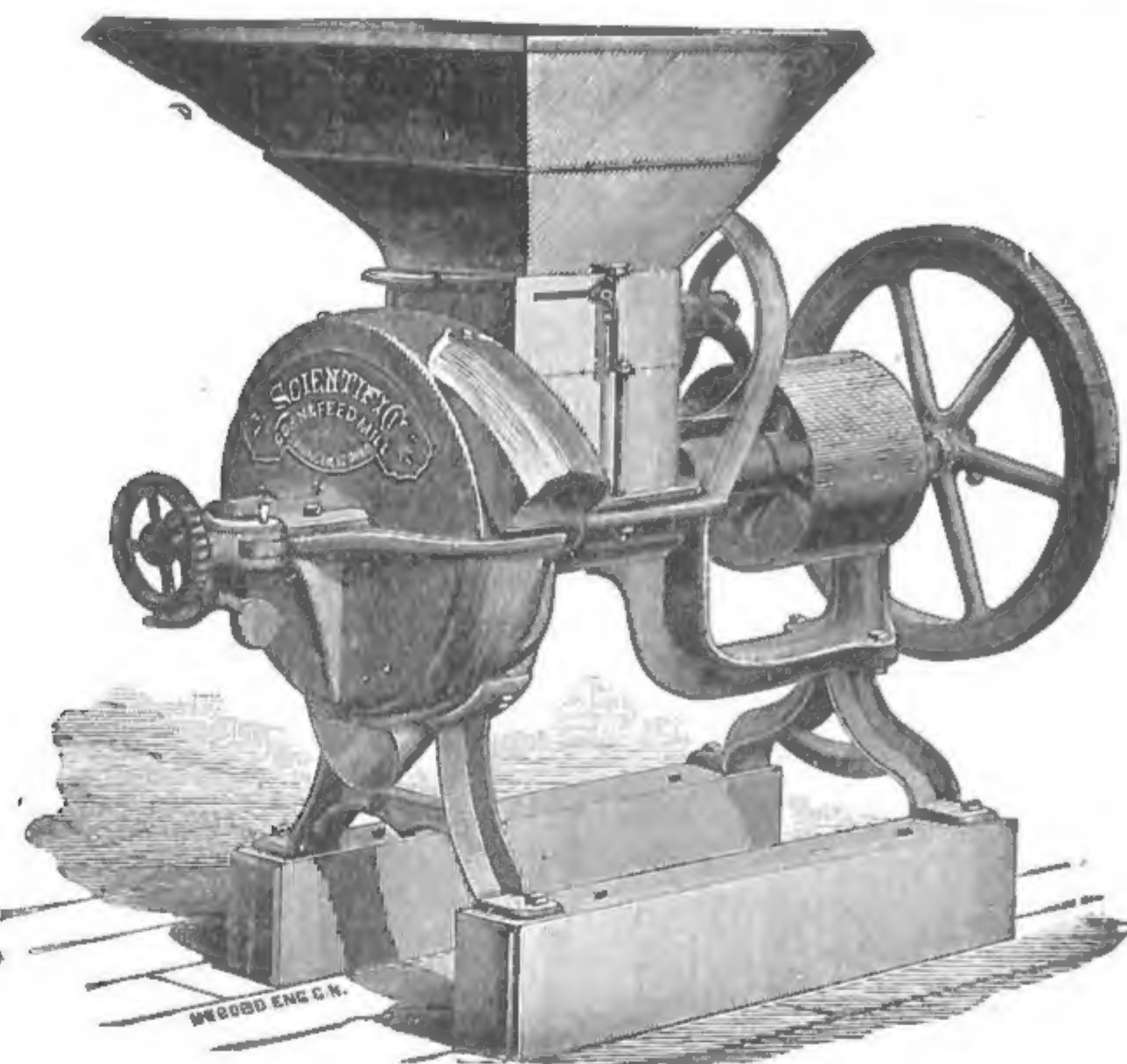
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